

FILE COPY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1

5 Post Office Square, Suite 100

BOSTON, MA 02109-3912

CERTIFIED MAIL RETURN RECEIPT REQUESTED

DEC 13 2012

Kathy Binford, Vice President
Cambridge Park Apartments Limited Partnership
5847 San Felipe, Suite 3600
Houston, TX 77057

Re: Authorization to discharge under the Remediation General Permit (RGP) –
MAG910000. Building Construction site at 160 Cambridgepark Drive, Cambridge, MA
02140, Middlesex County; Authorization # MAG910561

Dear Ms. Binford:

Based on the review of a Notice of Intent (NOI) submitted on behalf of Cambridge Park Apartments Limited Partnership by the firm Haley & Aldrich, Inc., for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the checklist does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Please note the enclosed checklist includes parameters that exceeded Appendix III limits. Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on selected dilution ranges and technology-based ceiling limitations. For each parameter the dilution factor 5.48 for this site is within a dilution range greater than 5 to 10, established in the RGP. (See the RGP Appendix IV for Massachusetts facilities). Therefore, the limits for antimony of 30 ug/L, arsenic of 50 ug/L, hexavalent chromium of 244 ug/L, copper of 26 ug/L, lead of 6.5 ug/L, nickel of 145 ug/L, silver of 6 ug/L, zinc of 333 ug/L and iron of 5,000ug/L, are required to achieve permit compliance at your site.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 1
 275 Old Office Square, Suite 100
 Boston, MA 02109-2941



RETURNED MAIL RETURN RECEIPT REQUESTED

DEC 13 2012

Mr. [Name], [Address]
 [City], [State], [Zip]
 [Phone Number]

Re: [Subject]
 [Reference Number]

The [Subject] is a [Type] of [Material] [Description]
 [Details about the material and its use]

The [Subject] is [Type] of [Material] [Description]
 [Details about the material and its use]

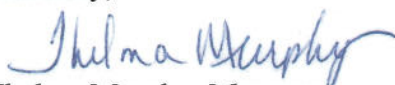
The [Subject] is [Type] of [Material] [Description]
 [Details about the material and its use]

Finally, please note the checklist of pollutants attached to this authorization is subject to a recertification if the operations at the site result in a discharge lasting longer than six months. A recertification can be submitted to EPA within six (6) to twelve (12) months of operations in accordance with the 2010 RGP regulations.

This general permit and authorization to discharge will expire on September 9, 2015. You have reported that this project will terminate on December 31, 2014. If for any reason the discharge terminates sooner you are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,


Thelma Murphy, Manager
Storm Water and Construction
Permits Section

Enclosure

cc: Robert Kubit, MassDEP
Lisa Peterson, City of Cambridge DPW
Todd R. Butler, Haley & Aldrich

**2010 Remediation General Permit
Summary of Monitoring Parameters^[1]**

NPDES Authorization Number:	MAG910561
Authorization Issued:	December, 2012
Facility/Site Name:	Building Construction
Facility/Site Address:	160 Cambridgepark Drive, Cambridge, MA 02140
	Email address of owner: kbindford@honoverco.com
Legal Name of Operator:	Cambridge Park Apartments Limited Partnership
Operator contact name, title, and Address:	Kathy Bindford Owner/Operator representative at 5847 San Felipe, Suite 3600. Houston, TX 77057. Site Manager is Haley & Aldrich Consulting Firm. Telephone 617.8867400
	Email: Same as the owner
Estimated date of Completion:	December 31, 2014
Category and Sub-Category:	Contaminated construction dewatering Subcategory A. General Urban Fill Site
RGP Termination Date:	September 10, 2015
Receiving Water:	Alewife Brook

Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	1. Total Suspended Solids (TSS)	30 milligrams/liter (mg/L) **, 50 mg/L for hydrostatic testing ** Me#160.2/ML5ug/L
✓	2. Total Residual Chlorine (TRC) ¹	Freshwater = 11 ug/L ** Saltwater = 7.5 ug/L **/ Me#330.5/ML 20ug/L
	3. Total Petroleum Hydrocarbons (TPH)	5.0 mg/L/ Me# 1664A/ML 5.0mg/L
	4. Cyanide (CN) ^{2, 3}	Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/L **/ Me#335.4/ML 10ug/L
	5. Benzene (B)	5ug/L /50.0 ug/L for hydrostatic testing only/ Me#8260C/ML 2 ug/L
	6. Toluene (T)	(limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L
	7. Ethylbenzene (E)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	8. (m,p,o) Xylenes (X)	(limited as ug/L total BTEX) Me#8260C/ ML 2ug/L
	9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) ⁴	100 ug/L/ Me#8260C/ ML 2ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)	0.05 ug/l/ Me#8260C/ ML 10ug/L
	11. Methyl-tert-Butyl Ether (MtBE)	70.0 ug/l/Me#8260C/ML 10ug/L
	12.tert-Butyl Alcohol (TBA) (TertiaryButanol)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	13. tert-Amyl Methyl Ether (TAME)	Monitor Only(ug/L)/Me#8260C/ML 10ug/L
	14. Naphthalene ⁵	20 ug/L /Me#8260C/ML 2ug/L
	15. Carbon Tetrachloride	4.4 ug/L /Me#8260C/ ML 5ug/L
	16. 1,2 Dichlorobenzene (o-DCB)	600 ug/L /Me#8260C/ ML 5ug/L
	17. 1,3 Dichlorobenzene (m-DCB)	320 ug/L /Me#8260C/ ML 5ug/L
	18. 1,4 Dichlorobenzene (p-DCB)	5.0 ug/L /Me#8260C/ ML 5ug/L
	18a. Total dichlorobenzene	763 ug/L - NH only /Me#8260C/ ML 5ug/L
	19. 1,1 Dichloroethane (DCA)	70 ug/L /Me#8260C/ ML 5ug/L
	20. 1,2 Dichloroethane (DCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	21. 1,1 Dichloroethene (DCE)	3.2 ug/L/Me#8260C/ ML 5ug/L
	22. cis-1,2 Dichloroethene (DCE)	70 ug/L/Me#8260C/ ML 5ug/L
	23. Methylene Chloride	4.6 ug/L/Me#8260C/ ML 5ug/L
	24. Tetrachloroethene (PCE)	5.0 ug/L/Me#8260C/ ML 5ug/L
	25. 1,1,1 Trichloro-ethane (TCA)	200 ug/L/Me#8260C/ ML 5ug/L
	26. 1,1,2 Trichloro-ethane (TCA)	5.0 ug/L /Me#8260C/ ML 5ug/L
	27. Trichloroethene (TCE)	5.0 ug/L /Me#8260C/ ML 5ug/L
	28. Vinyl Chloride (Chloroethene)	2.0 ug/L /Me#8260C/ ML 5ug/L
✓	29. Acetone	Monitor Only(ug/L)/Me#8260C/ML 50ug/L
	30. 1,4 Dioxane	Monitor Only /Me#1624C/ML 50ug/L
	31. Total Phenols	300 ug/L Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML 50ug/L
	32. Pentachlorophenol (PCP)	1.0 ug/L /Me#8270D/ML 5ug/L,Me#604 &625/ML 10ug/L
	33. Total Phthalates (Phthalate esters) ⁶	3.0 ug/L ** /Me#8270D/ML 5ug/L, Me#606/ML 10ug/L& Me#625/ML 5ug/L
	34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	6.0 ug/L /Me#8270D/ML 5ug/L,Me#606/ML 10ug/L & Me#625/ML 5ug/L
	35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)	10.0 ug/L
✓	a. Benzo(a) Anthracene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L

	<u>Parameter</u>	<u>Effluent Limit/Method#/ML</u> (All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit)
	b. Benzo(a) Pyrene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	c. Benzo(b)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	d. Benzo(k)Fluoranthene ⁷	0.0038 ug/L /Me#8270D/ ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	e. Chrysene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	f. Dibenzo(a,h)anthracene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
✓	g. Indeno(1,2,3-cd) Pyrene ⁷	0.0038 ug/L /Me#8270D/ML 5ug/L, Me#610/ML 5ug/L& Me#625/ML 5ug/L
	36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)	100 ug/L
✓	h. Acenaphthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	i. Acenaphthylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	j. Anthracene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	k. Benzo(ghi) Perylene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	l. Fluoranthene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	m. Fluorene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	n. Naphthalene ⁵	20 ug/L / Me#8270/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	o. Phenanthrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
✓	p. Pyrene	X/Me#8270D/ML 5ug/L, Me#610/ML 5ug/L & Me#625/ML 5ug/L
	37. Total Polychlorinated Biphenyls (PCBs) ^{8,9}	0.000064 ug/L/Me# 608/ ML 0.5 ug/L
✓	38. Chloride	Monitor only/Me# 300.0/ ML 100 ug/L

	<u>Metal parameter</u>	<u>Total Recoverable Metal Limit @ H ¹⁰ = 50 mg/l CaCO3 for discharges in Massachusetts (ug/l) 11/12</u>		<u>Minimum level=ML</u>
		<u>Freshwater</u>	<u>Saltwater</u>	
✓	39. Antimony	30/ML 10		
✓	40. Arsenic **	50/ML 20	36/ML 20	

	Metal parameter	Total Recoverable Metal Limit @ H¹⁰ = 50 mg/l CaCO₃ for discharges in Massachusetts (ug/l) 11/12		Minimum level=ML	
		Freshwater	Saltwater		
	41. Cadmium **	0.2/ML10	8.9/ML 10		
✓	42. Chromium III (trivalent) **	244/ML15	100/ML 15		
	43. Chromium VI (hexavalent) **	11.4/ML10	50.3/ML 10		
✓	44. Copper **	26/ML15	3.7/ML 15		
✓	45. Lead **	6.5/ML20	8.5/ML 20		
	46. Mercury **	0.9/ML0.2	1.1/ML 0.2		
✓	47. Nickel **	145/ML20	8.2/ML 20		
	48. Selenium **	5/ML20	71/ML 20		
✓	49. Silver	6/ML10	2.2/ML 10		
✓	50. Zinc **	333/ML15	85.6/ML 15		
✓	51. Iron	5,000/ML 20			

	Other Parameters	Limit
✓	52. Instantaneous Flow	Site specific in CFS
✓	53. Total Flow	Site specific in CFS
✓	54. pH Range for Class A & Class B Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	55. pH Range for Class SA & Class SB Waters in MA	6.5-8.3; 1/Month/Grab ¹³
	56. pH Range for Class B Waters in NH	6.5-8; 1/Month/Grab ¹³
	57. Daily maximum temperature - Warm water fisheries	83°F; 1/Month/Grab ¹⁴
	58. Daily maximum temperature - Cold water fisheries	68°F; 1/Month/Grab ¹⁴
	59. Maximum Change in Temperature in MA - Any Class A water body	1.5°F; 1/Month/Grab ¹⁴
	60. Maximum Change in Temperature in MA - Any Class B water body- Warm Water	5°F; 1/Month/Grab ¹⁴
	61. Maximum Change in Temperature in MA - Any Class B water body - Cold water and Lakes/Ponds	3°F; 1/Month/Grab ¹⁴
	62. Maximum Change in Temperature in MA - Any Class SA water body - Coastal	1.5°F; 1/Month/Grab ¹⁴
	63. Maximum Change in Temperature in MA - Any Class SB water body - July to September	1.5°F; 1/Month/Grab ¹⁴
	64. Maximum Change in Temperature in MA -Any Class SB water body - October to June	4°F; 1/Month/Grab ¹⁴

Footnotes:

¹ Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

² Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

³ Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).

⁴ BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.

⁵ Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

⁶ The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁷ Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

⁸ In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.

⁹Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).

¹⁰ Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.

¹¹ For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using $DF \times 1,000 \text{ ug/L}$ (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit = $1,000 \times 2 = 2,000 \text{ ug/L}$, etc. not to exceed the DF=5.

¹² Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

¹³ pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

¹⁴ Temperature sampling per Method 170.1

Although the maximum values for TPC are 15 µg/l and 1.5 µg/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.2, 50 µg/l).

Units for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.

Although the maximum values for cyanide are 2.5 µg/l and 1.0 µg/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 10 µg/l).

Units for sum of Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX) can be reported as both a group (VOC) and extractable (BTEX).

Asphaltenes can be reported as both a group (VOC) and extractable (BTEX).

Organic compounds: If both VOC and BTEX are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.

The sum of individual phthalate compounds (not including the 2,3,4,5-tetrahydrophthalate) is phthalate. The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

Values calculated for reporting on VOCs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measured concentration of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach to each constituent to the discharge monitoring report, including the minimum level and maximum detection level for the analysis.

Although the maximum value for the individual PAH compounds is 0.0028 µg/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.

In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologous, all isomers, all congeners, and all associated analyses. Total values calculated for reporting on VOCs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach to each constituent to the discharge monitoring report, including the minimum level and maximum detection level for the analysis.

Although the maximum value for total PCBs is 0.0005 µg/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 µg/l for Method 808 or 0.0002 µg/l when Method 1631A is approved).

Other metals: Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are reported separately.

For a solution factor (DF) from 1 to 5, metals limits are calculated using DF times the value limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000 µg/l (the iron base limit). Therefore DF is 1/5, the iron limit will be 200 µg/l. DF 5, then iron limit = 1,000 x 5 = 5,000 µg/l, etc. not to exceed the DF x 5.

Minimum level (ML) is the lowest level at which the analytical system gives a reproducible signal and acceptable calibration point for the analysis. The ML represents the lowest concentration at which an analyte can be measured without a given level of confidence. The ML is calculated by multiplying the laboratory determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).

If sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.

For aqueous sampling see Method 150.1.

**REPORT ON
NOTICE OF INTENT (NOI) TEMPORARY CONSTRUCTION
DEWATERING
160 CAMBRIDGE PARK DRIVE
CAMBRIDGE, MASSACHUSETTS**

by

**Haley & Aldrich, Inc.
Boston, Massachusetts**

for

**US Environmental Protection Agency
Boston, Massachusetts**

**File No. 35060-041
13 November 2012**



13 November 2012
File No. 35060-041

US Environmental Protection Agency
Industrial NPDES Permits (CIP)
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Attention: Ms. Shelly Puleo

Subject: Notice of Intent (NOI)
Temporary Construction Dewatering
160 Cambridgepark Drive
Cambridge, Massachusetts

Dear Ms. Puleo:

On behalf of the project developer, Cambridge Park Apartments Limited Partnership, and in accordance with the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP) in Massachusetts, MAG910000, this letter submits a Notice of Intent (NOI) and the applicable documentation as required by the US Environmental Protection Agency (EPA) for temporary construction site dewatering under the RGP. Temporary dewatering is planned in support of the proposed site development which includes construction of a four- to five-story residential building with one level of at-grade parking located at 160 Cambridgepark Drive in Cambridge, Massachusetts as shown on Figure 1 – Project Locus. We anticipate construction dewatering will be conducted, as necessary, during foundation construction and below grade excavation.

Figure 2 - Site and Subsurface Exploration Plan shows the location of the site. Site grades range from approximately El. 17 to El. 19.¹ The site is currently occupied by an asphalt-paved parking lot and is used for surface parking of automobiles by employees of a nearby office building.

SITE HISTORY

Past usage of the project site was assessed through a review of previous environmental reports prepared for the Project site, aerial photographs dated 1938, 1955, 1960, 1978, 1980, 1995, Sanborn Fire Insurance Maps dated 1986, 1990, 1992, and 1995, and information obtained at the City of Cambridge municipal offices.

The 1930 aerial photograph depicts the project site as vacant land. According to a previous environmental report for the project site, prior to 1947 the project site was a vacant wetland owned by the Boston & Maine Railroad. In 1947, the project site and adjacent land was purchased by the West

¹ Elevations reported herein are in feet and reference the Cambridge City Base (CCB) datum, which is 10.84 ft below the National Geodetic Vertical Datum of 1929 (NGVD).

End Iron Works Company. West End Iron Works conducted steel fabrication and other metal production until 1983. A principal product of West End Iron Works activities was scrap iron. The 1955, 1960, 1978, and 1980 aerial photographs depict West End Iron Works as consisting of 2 to 3 large connected steel buildings with a majority of the project site utilized to store steel, iron, and other scrap metals. In 1983, the Project site and adjacent land was purchased for redevelopment and the Iron Works buildings were demolished in preparation for the current development. The 1986 Sanborn map does not provide coverage of the Project site; however, the 1990, 1992, and 1995 Sanborn maps and the 1995 aerial photograph depict the Project site as paved parking, which was observed during Haley & Aldrich's April 2007 site visit.

MASSACHUSETTS MCP REGULATORY BACKGROUND

The project site was part of a larger area of land first reported to MassDEP under RTN 3-1411 in the late 1980's due to impacts from the historic iron works operations and urban fill typical of this area. Previous investigations conducted at the site in the early 1990's concluded that identified levels of petroleum hydrocarbons and certain PAHs did not pose risk for unrestricted future use (residential). A Phase II MCP report and a Class B-1 Response Action Outcome (RAO) Statement were submitted to MassDEP on 1 June 1995 to achieve regulatory closure for the larger area of land.

Additional compounds not previously evaluated in the 1995 RAO were detected at the site during the due diligence phase at concentrations that exceeded the applicable Reportable Concentrations. The current property owner reported the environmental conditions to the MassDEP on 23 April 2012 for the parcel of land identified as 150 to 180 Cambridgepark Drive based on the due diligence testing and recent soil testing conducted by the City of Cambridge for storm drain utility installation. The release notification reported concentrations of metals (lead, arsenic, barium, cadmium and mercury), PAHs and EPH/VPH petroleum hydrocarbon ranges in site soil. DEP issued release tracking number (RTN) for the adjacent property at 150 Cambridgepark Drive (RTN 3-30779) and a separate RTN for the property that Cambridge Park Apartments Limited Partnership will develop at 160 Cambridgepark Drive (RTN 3-30902) based on submittal of a revised RNF on 22 June 2012 for conditions originally reported as part of the RNF in April 2012.

It is planned to conduct soil management during site development under a Release Abatement Measure (RAM) Plan prepared for the site to achieve a Permanent Solution under the Massachusetts Contingency Plan (MCP).

In accordance with the MCP, soil management will be conducted under a Release Abatement Measure (RAM) Plan. The RAM Plan will be filed with the MassDEP prior to commencement of soil management activities in accordance with the 310 CMR 40.442 (3) and 310 CMR 40.0444.

TEMPORARY CONSTRUCTION DEWATERING NOTICE OF INTENT

In support of the NOI, one groundwater sample was obtained from observation well HA-2(OW) on 6 and 10 August 2012. The groundwater sample was submitted to Alpha Analytical, Inc. of Westborough, Massachusetts (Alpha Analytical) for analysis for NPDES permit parameters including VOCs, SVOCs, PAHs, total metals, dissolved metals, TPH, pesticides, PCBs, Total Suspended Solids (TSS), chloride, total cyanide, total phenolics and total residual chlorine. The analytical results for the

groundwater sample identified concentrations of select SVOCs, total and dissolved iron, total and dissolved arsenic, and dissolved lead above applicable NPDES RGP Category III Effluent Limits but below applicable MCP RCGW-2 Reportable Concentrations. The results of water quality testing conducted for this NOI are summarized in Table I. The location of the observation well is shown on Figure 2.

Dewatering will be conducted from sumps or wells located inside the proposed development area. Dewatering is necessary to control groundwater, seepage, precipitation, and surface water runoff and construction-generated water to enable below-grade construction activities in-the-dry. Construction activities are scheduled to begin on or about 3 December, 2012. Construction dewatering effluent will be recharged on-site to the extent possible.

Prior to discharge under this NOI, collected water will be routed through a sedimentation tank and/or bag filters, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental pretreatment may be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3. Supplemental pretreatment may include Oil/Water Separators, Ion Exchange, granular activated carbon, and/or other treatment technologies as required to meet the NPDES discharge criteria. Construction dewatering under this RGP NOI will include piping and will discharge to a storm drain located near the site. The drain travels east along Cambridgepark Drive and discharges from outfall "D45" to a drainage ditch leading to Alewife Brook. The proposed discharge route is shown on Figure 4.

APPENDICES

The completed "Suggested Notice of Intent" NOI form as provided in the RGP is enclosed in Appendix A. The site developer is Cambridge Park Apartments Limited Partnership. Cambridge Park Apartments Limited Partnership will hire a subcontractor to conduct the Site work, including dewatering activities. The excavation subcontractor will operate the dewatering system. Haley & Aldrich, Inc. will monitor the Contractor's dewatering activities on behalf of Cambridge Park Apartments Limited Partnership in accordance with the requirements for this NOI submission.

A Best Management Practices Plan (BMPP), which outlines the proposed discharge operations covered under the RGP, is included in Appendix B. Appendices C and D include the National Register of Historic Places and Endangered Species Act Documentation, respectively. Appendix E provides the City of Cambridge Dewatering Permit Application to be submitted separately to the City of Cambridge. A copy of the groundwater testing laboratory results are provided in Appendix F.

DILUTION FACTOR APPLICATION FOR METALS

A Dilution Factor (DF) was calculated for the detected levels of total metals greater than the applicable effluent limits. The DF is applicable to iron, lead and arsenic, and the calculated DF was used to find the appropriate Dilution Range concentrations for these metals. The DF was calculated using the following equation:

$$DF = (Q_d + Q_s)/Q_d$$

Where Q_d is the maximum discharge flow rate, estimated to be 100 gallons per minute (GPM) or approximately 0.223 cubic feet per second (cfs), and Q_s is the receiving water flow rate, minimum for 7 consecutive days with a recurrence interval of 10 years, calculated to be 1.0 cfs. Using these

estimated/calculated values, the DF is equal to 5.5. According to Appendix IV of the Remediation General Permit, the ceiling limitation for the calculated dilution factor of 5.5 for iron is 5000 ug/L, lead is 6.5 ug/L, and arsenic is 50 ug/L. If testing of the dewatering effluent indicates that the iron, lead or arsenic concentrations are greater than 5000, 6.5 or 50 ug/L, respectively, pretreatment of the dewatering effluent will include an ion exchange unit or other technology to remove dissolved metals as shown on Figure 3.

CLOSING

Thank you very much for your consideration of this NOI. Please feel free to contact us should you wish to discuss the information contained herein or if you need additional information.

Sincerely yours,
HALEY & ALDRICH, INC.



Todd R. Butler, P.E.
Project Manager



Keith E. Johnson, P.E., L.S.P.
Vice President

Attachments:

- Table I – Summary of Groundwater Quality Data
- Figure 1 – Project Locus
- Figure 2 – Site and Subsurface Exploration Location Plan
- Figure 3 – Proposed Treatment System Schematic
- Figure 4 – Proposed Dewatering Discharge Route
- Appendix A – Notice of Intent (NOI) for Remediation General Permit (RGP)
- Appendix B – Best Management Practices Plan (BMPP)
- Appendix C – National Register of Historic Places and Massachusetts
Historical Commission Documentation
- Appendix D – Endangered Species Act Documentation
- Appendix E – City of Cambridge Dewatering Permit Application
- Appendix F – Laboratory Data Reports

c: Cambridge Park Apartments Limited Partnership; Attn: Tom Denney, Michael King
Massachusetts Department of Environmental Protection; Attn: Division of Watershed Management

\\BOS\common\35060\041 - Dewatering NOI\RGP\2012_1109_HAI_NPDES RGP Text-F.docx

TABLE

TABLE I - SUMMARY OF GROUNDWATER QUALITY DATA
 160 CAMBRIDGE PARK DRIVE
 CAMBRIDGE, MASSACHUSETTS
 FILE NO.: 35060-041

SAMPLING DESIGNATION SAMPLING DATE LAB SAMPLE ID	MCP RCGW-2 Reportable Concentration	2012_0806_NPDES1 8/6/2012 L1214029-01	2012_0810_NPDES1 8/10/2012 L1214375-01
SAMPLE TYPE		Aqueous	Aqueous
VOCs (µg/l)			
1,2-Dichlorobenzene	2000	ND(1.25)	-
Acetone	50000	9	-
n-Propylbenzene	10000	5.6	-
Total VOCs		14.6	
SVOCs (µg/l)			
Total SVOCs	-	-	ND
Total Phthalates	-	-	ND
SVOCs by SIM (µg/l)			
Acenaphthene	6000	-	0.39
Anthracene	30	-	1.3
Benzo(a)anthracene	1000	-	0.24
Benzo(b)fluoranthene	400	-	0.32
Benzo(ghi)perylene	20	-	0.25
Benzo(k)fluoranthene	100	-	0.26
Chrysene	70	-	0.34
Fluoranthene	200	-	0.76
Fluorene	40	-	0.31
Indeno(1,2,3-cd)Pyrene	100	-	0.23
Phenanthrene	10000	-	0.55
Pyrene	20	-	0.52
Total SVOCs by SIM		-	5.47
Total Group I PAHs	-	-	1.39
Total Group II PAHs	-	-	4.08
Pesticides (µg/l)			
1,2-Dibromoethane	2	ND(0.005)	-
Polychlorinated Biphenyls (µg/l)			
Total PCBs	-	ND	-
Dissolved Metals (µg/l)			
Antimony, Dissolved	8000	1.3	-
Arsenic, Dissolved	900	17.6	-
Iron, Dissolved	NA	3400	-
Nickel, Dissolved	200	4.5	-
Zinc, Dissolved	900	16.7	-
Total Metals (µg/l)			
Antimony, Total		1.4	-
Arsenic, Total		37.4	-
Chromium, Total		1.4	-
Copper, Total		1.3	-
Iron, Total		7100	-
Lead, Total		1.9	-
Nickel, Total		2.4	-
Silver, Total		0.5	-
Zinc, Total		16.3	-
Anions (µg/l)			
Chloride	NA	500000	-
General Chemistry			
Solids, Total Suspended	NA	ND(10)	-
Cyanide, Total	30	ND(5)	-
Chlorine, Total Residual	NA	9	-
TPH	5000	ND(15)	-
Phenolics, Total	NA	9200	-
Chromium, Hexavalent	300	ND(5)	-

NOTES & ABBREVIATIONS:

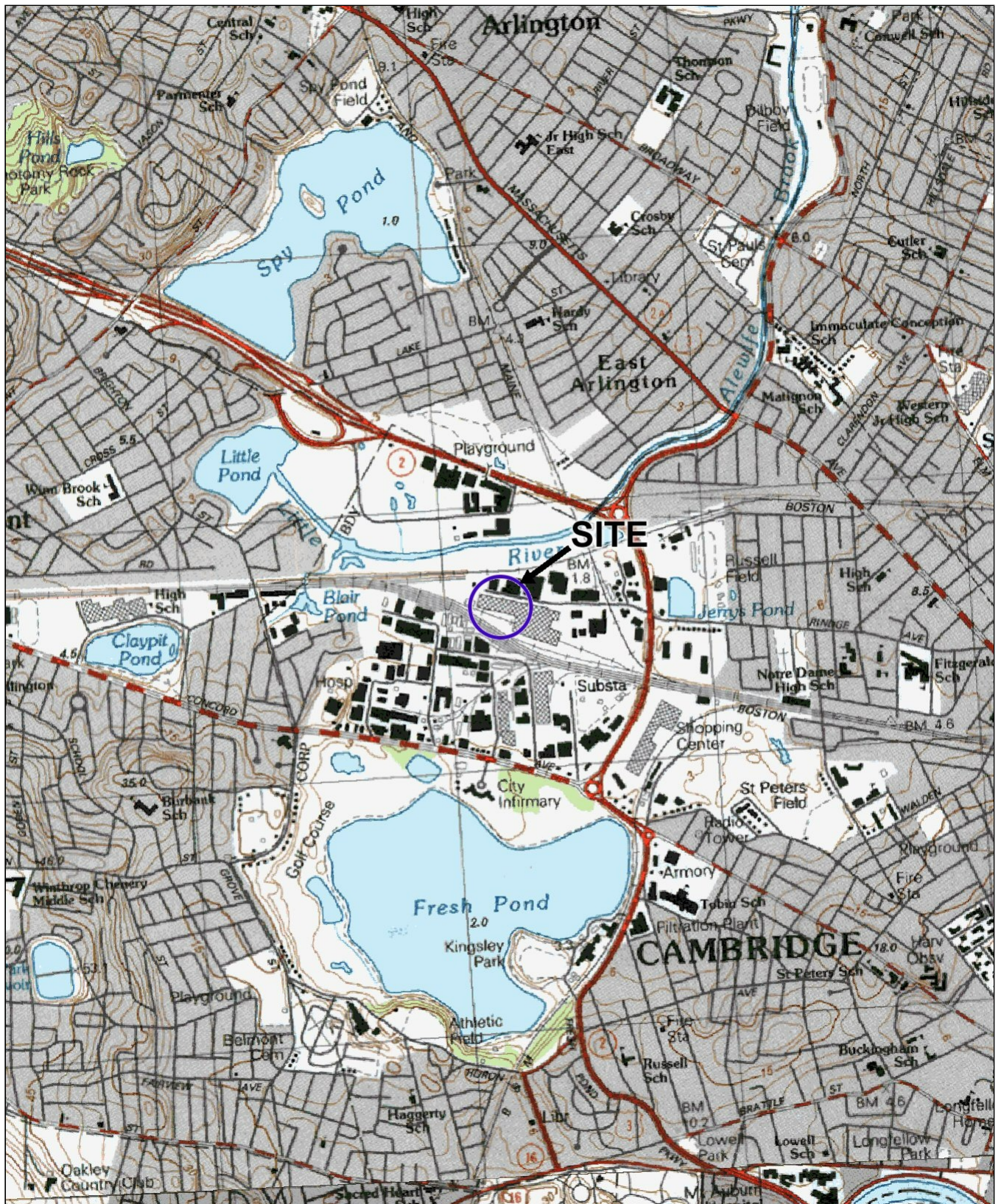
VOCs: Volatile Organic Compounds

SVOCs: Semivolatile Organic Compounds

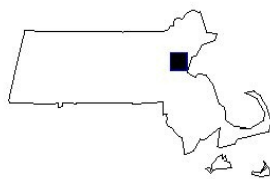
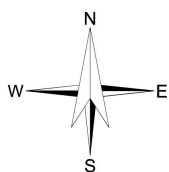
1. ND(0.25) indicates analyte was not detected above laboratory quantification limit.

Number in parentheses is one-half quantification limit.

FIGURES



SITE COORDINATES: 42°23'41"N 71°8'52"W



U.S.G.S. QUADRANGLE: LEXINGTON, MA

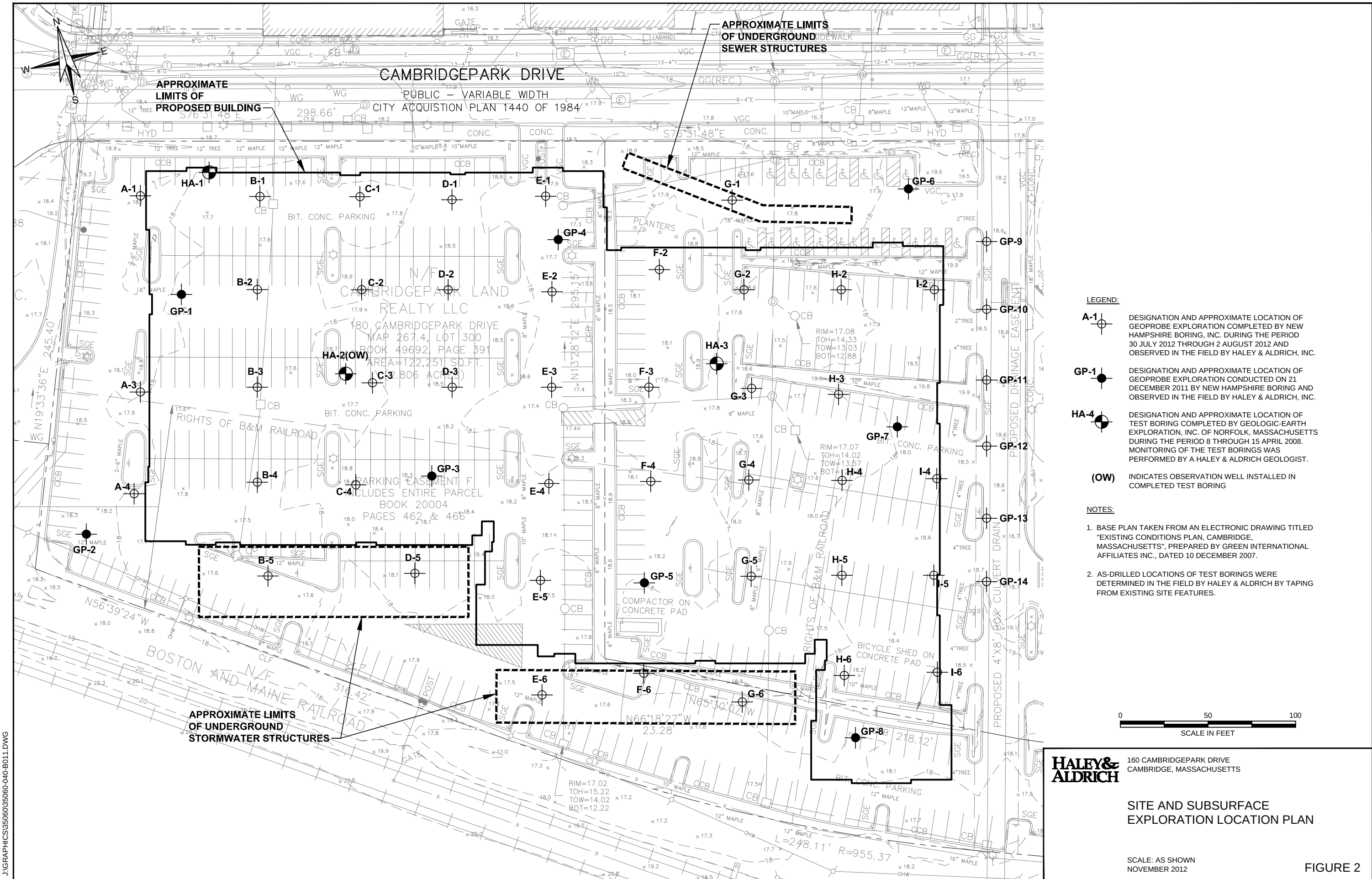
HALEY & ALDRICH

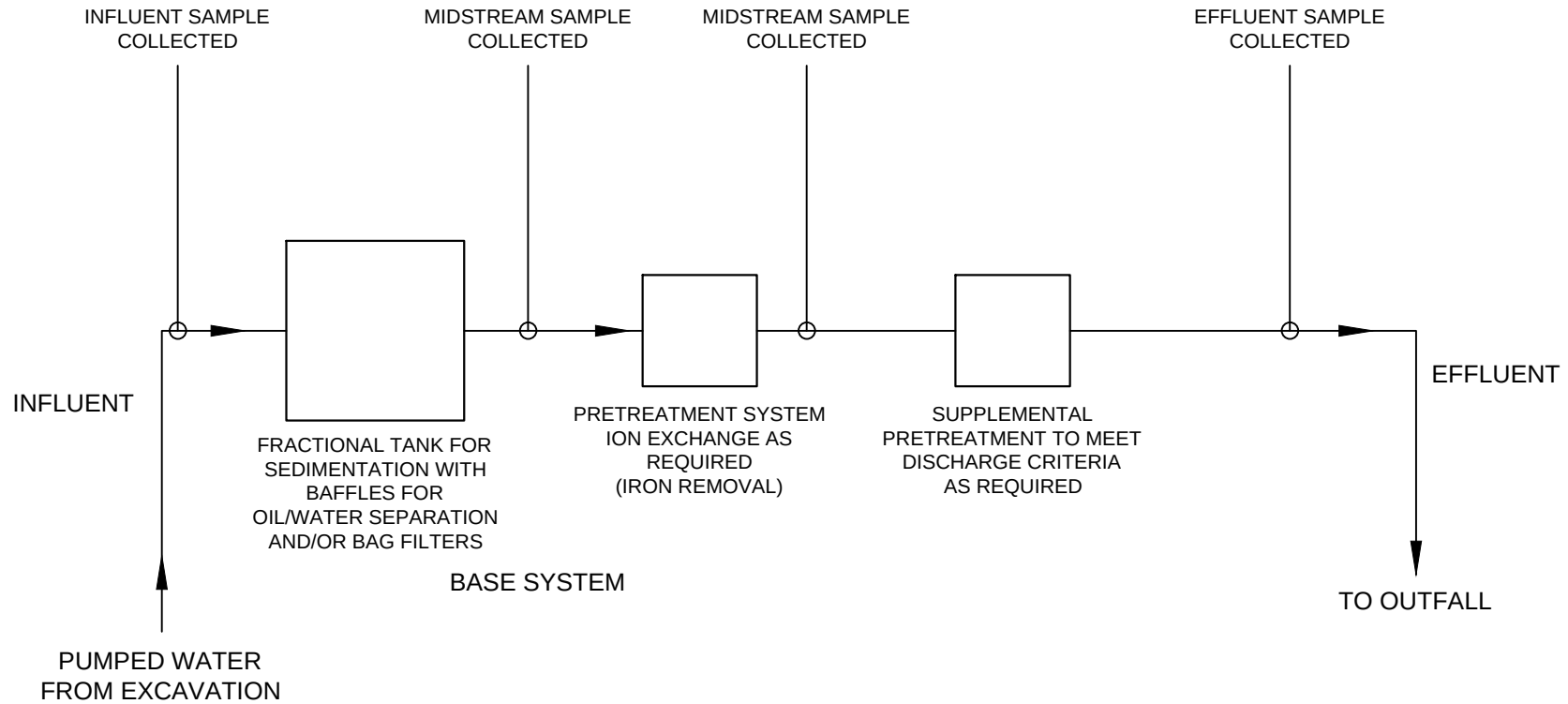
160 CAMBRIDGE PARK DRIVE
CAMBRIDGE, MASSACHUSETTS

PROJECT LOCUS

SCALE: 1:24,000
NOVEMBER 2012

FIGURE 1





LEGEND:

—▶ DIRECTION OF FLOW

NOTE:

1. DETAILS OF TREATMENT SYSTEM MAY VARY FROM SYSTEM INDICATED ABOVE. SPECIFIC MEANS AND METHODS OF TREATMENT TO BE SELECTED BY CONTRACTOR. WATER WILL BE TREATED TO MEET REQUIRED EFFLUENT STANDARDS.

HALEY & ALDRICH

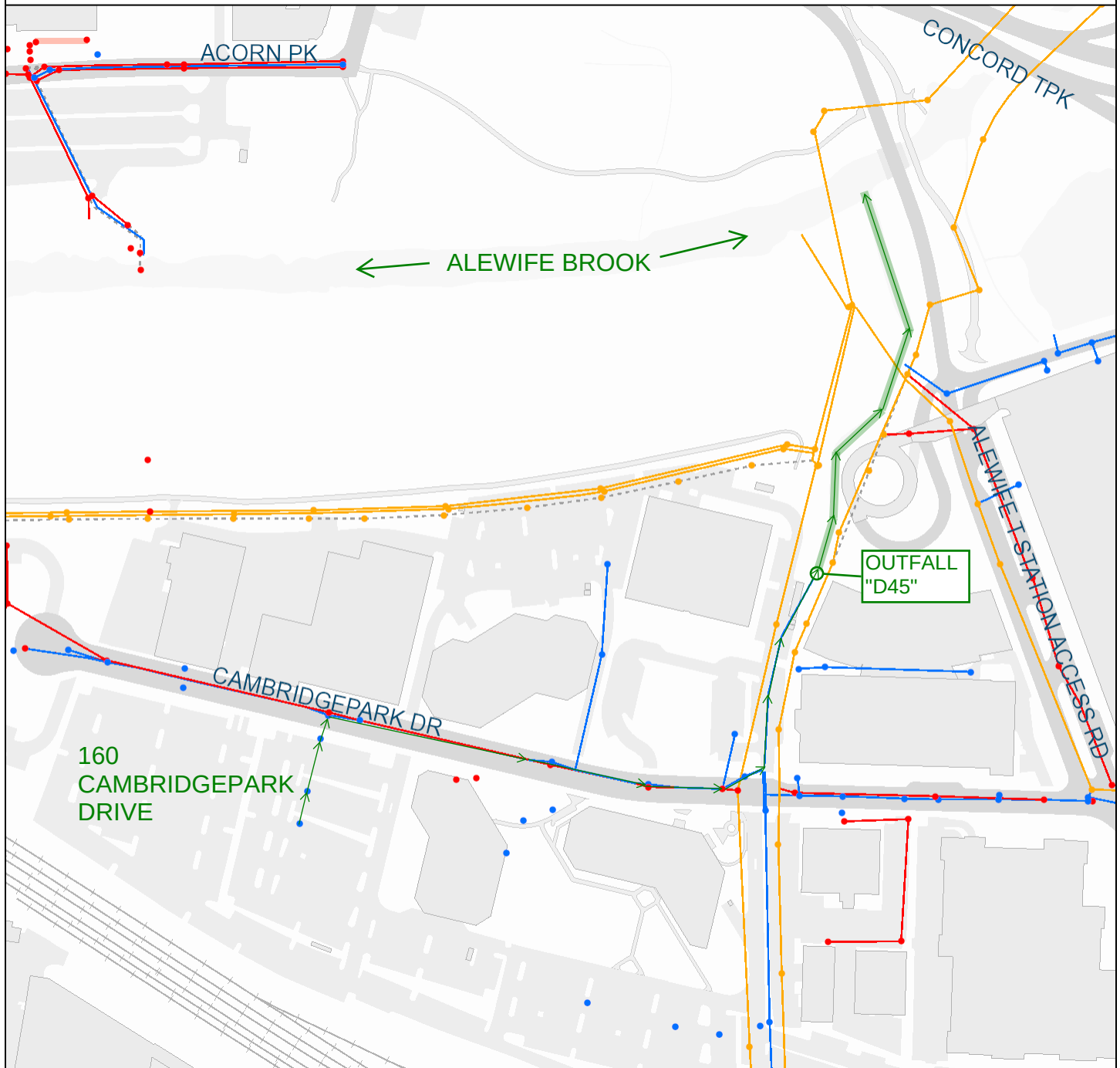
160 CAMBRIDGE PARK DRIVE
CAMBRIDGE, MASSACHUSETTS

**PROPOSED TREATMENT SYSTEM
SCHEMATIC**

SCALE: NONE
NOVEMBER 2012

FIGURE 3

160 Cambridgepark Drive to Outfall D45



City of Cambridge
Massachusetts

1" = 236 ft

All data is provided for graphic representation only. The City of Cambridge expressly disclaims all warranties of any type, expressed or implied, including, but not limited to, any warranty as to the accuracy of the data, merchantability, or fitness for a particular purpose.

- Gravity Main
 — Stormwater
 — Sewage
 — Combined Sewage
 - - - Abandoned
- Zoom Three Paved Surfaces
 ■ Paved Roads
 ■ Paved Parking
 ■ Bridges
 ■ Public Footpath

HALEY & ALDRICH MARK UPS:

- Proposed Dewatering Discharge Route
 — Approximate Limits of Drainage Ditch

PROPOSED DEWATERING
DISCHARGE ROUTE

FIGURE 4

APPENDIX A

Notice of Intent (NOI) For Remediation General Permit (RGP)

B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit

1. General facility/site information. Please provide the following information about the site:

a) Name of facility/site :		Facility/site mailing address:	
Location of facility/site : longitude: _____ latitude: _____	Facility SIC code(s):	Street:	
b) Name of facility/site owner : Cambridge Park Apartments Limited Partnership		Town:	
Email address of facility/site owner:	State: Cambridge Park Apartments Limited Partnership	Zip:	County:
Telephone no. of facility/site owner :			
Fax no. of facility/site owner :	Owner is (check one): 1. Federal____ 2. State/Tribal____ 3. Private____ 4. Other ____ if so, describe:		
Address of owner (if different from site):			
Street:			
Town:	State:	Zip:	County:
c) Legal name of operator :	Operator telephone no:		
	Operator fax no.:		Operator email:
Operator contact name and title:			
Address of operator (if different from owner):	Street:		
Town:	State:	Zip:	County:

d) Check Y for “yes” or N for “no” for the following: 1. Has a prior NPDES permit exclusion been granted for the discharge? Y___ N___, if Y, number:_____ 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Y___ N___, if Y, date and tracking #:_____ 3. Is the discharge a “new discharge” as defined by 40 CFR 122.2? Y___ N___ 4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y___ N___	
e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y___ N___ If Y, please list: 1. site identification # assigned by the state of NH or MA: _____ 2. permit or license # assigned: _____ 3. state agency contact information: name, location, and telephone number: _____	f) Is the site/facility covered by any other EPA permit, including: 1. Multi-Sector General Permit? Y___ N___, if Y, number: _____ 2. Final Dewatering General Permit? Y___ N___, if Y, number: _____ 3. EPA Construction General Permit? Y___ N___, if Y, number: _____ 4. Individual NPDES permit? Y___ N___, if Y, number: _____ 5. any other water quality related individual or general permit? Y___ N___, if Y, number: _____
g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y___ N___	
h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.	
<u>Activity Category</u>	<u>Activity Sub-Category</u>
I - Petroleum Related Site Remediation	A. Gasoline Only Sites _____ B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) _____ C. Petroleum Sites with Additional Contamination _____
II - Non Petroleum Site Remediation	A. Volatile Organic Compound (VOC) Only Sites _____ B. VOC Sites with Additional Contamination _____ C. Primarily Heavy Metal Sites _____
III - Contaminated Construction Dewatering	A. General Urban Fill Sites _____ B. Known Contaminated Sites _____

IV - Miscellaneous Related Discharges	A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites ____ B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites ____ C. Hydrostatic Testing of Pipelines and Tanks ____ D. Long-Term Remediation of Contaminated Sumps and Dikes ____ E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) ____
---------------------------------------	---

2. Discharge information. Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:	
b) Provide the following information about each discharge:	
1) Number of discharge points:	2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft ³ /s)? Max. flow _____ Is maximum flow a design value ? Y ____ N ____ Average flow (include units) _____ Is average flow a design value or estimate? _____
3) Latitude and longitude of each discharge within 100 feet: pt.1: lat. _____ long. _____; pt.2: lat. _____ long. _____; pt.3: lat. _____ long. _____; pt.4: lat. _____ long. _____; pt.5: lat. _____ long. _____; pt.6: lat. _____ long. _____; pt.7: lat. _____ long. _____; pt.8: lat. _____ long. _____; etc.	
4) If hydrostatic testing, total volume of the discharge (gals): _____	5) Is the discharge intermittent ____ or seasonal ____? Is discharge ongoing? Y ____ N ____
c) Expected dates of discharge (mm/dd/yy): start _____ end _____	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).	

3. Contaminant information.

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
1. Total Suspended Solids (TSS)											
2. Total Residual Chlorine (TRC)											
3. Total Petroleum Hydrocarbons (TPH)											
4. Cyanide (CN)	57125										
5. Benzene (B)	71432										
6. Toluene (T)	108883										
7. Ethylbenzene (E)	100414										
8. (m,p,o) Xylenes (X)	108883; 106423; 95476; 1330207										
9. Total BTEX ²	n/a										
10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) ³	106934										
11. Methyl-tert-Butyl Ether (MtBE)	1634044										
12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)	75650										

* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

² BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

³ EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
13. tert-Amyl Methyl Ether (TAME)	9940508										
14. Naphthalene	91203										
15. Carbon Tetrachloride	56235										
16. 1,2 Dichlorobenzene (o-DCB)	95501										
17. 1,3 Dichlorobenzene (m-DCB)	541731										
18. 1,4 Dichlorobenzene (p-DCB)	106467										
18a. Total dichlorobenzene											
19. 1,1 Dichloroethane (DCA)	75343										
20. 1,2 Dichloroethane (DCA)	107062										
21. 1,1 Dichloroethene (DCE)	75354										
22. cis-1,2 Dichloroethene (DCE)	156592										
23. Methylene Chloride	75092										
24. Tetrachloroethene (PCE)	127184										
25. 1,1,1 Trichloro-ethane (TCA)	71556										
26. 1,1,2 Trichloro-ethane (TCA)	79005										
27. Trichloroethene (TCE)	79016										

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
28. Vinyl Chloride (Chloroethene)	75014										
29. Acetone	67641										
30. 1,4 Dioxane	123911										
31. Total Phenols	108952										
32. Pentachlorophenol (PCP)	87865										
33. Total Phthalates (Phthalate esters) ⁴											
34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate]	117817										
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)											
a. Benzo(a) Anthracene	56553										
b. Benzo(a) Pyrene	50328										
c. Benzo(b)Fluoranthene	205992										
d. Benzo(k)Fluoranthene	207089										
e. Chrysene	21801										
f. Dibenzo(a,h)anthracene	53703										
g. Indeno(1,2,3-cd) Pyrene	193395										
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)											

⁴The sum of individual phthalate compounds.

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>
h. Acenaphthene	83329										
i. Acenaphthylene	208968										
j. Anthracene	120127										
k. Benzo(ghi) Perylene	191242										
l. Fluoranthene	206440										
m. Fluorene	86737										
n. Naphthalene	91203										
o. Phenanthrene	85018										
p. Pyrene	129000										
37. Total Polychlorinated Biphenyls (PCBs)	85687; 84742; 117840; 84662; 131113; 117817.										
38. Chloride	16887006										
39. Antimony	7440360										
40. Arsenic	7440382										
41. Cadmium	7440439										
42. Chromium III (trivalent)	16065831										
43. Chromium VI (hexavalent)	18540299										
44. Copper	7440508										
45. Lead	7439921										
46. Mercury	7439976										
47. Nickel	7440020										
48. Selenium	7782492										
49. Silver	7440224										
50. Zinc	7440666										
51. Iron	7439896										
Other (describe):											

<u>Parameter *</u>	<u>CAS Number</u>	<u>Believed Absent</u>	<u>Believed Present</u>	<u># of Samples</u>	<u>Sample Type (e.g., grab)</u>	<u>Analytical Method Used (method #)</u>	<u>Minimum Level (ML) of Test Method</u>	<u>Maximum daily value</u>		<u>Average daily value</u>	
								<u>concentration (ug/l)</u>	<u>mass (kg)</u>	<u>concentration (ug/l)</u>	<u>mass (kg)</u>

b) For discharges where **metals** are believed present, please fill out the following (attach results of any calculations):

<i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y____ N____	If yes, which metals?
<i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals? Metal:_____DF:_____ Metal:_____DF:_____ Metal:_____DF:_____ Metal:_____DF:_____ Etc.	Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y____ N____ If Y, list which metals:

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:						
b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper	Oil/water separator	Equalization tanks	Bag filter	GAC filter
	Chlorination	De-chlorination	Other (please describe):			

c) Proposed **average** and **maximum flow rates** (gallons per minute) for the discharge and the **design flow rate(s)** (gallons per minute) of the treatment system:

Average flow rate of discharge _____ gpm Maximum flow rate of treatment system _____ gpm

Design flow rate of treatment system _____ gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

a) Identify the discharge pathway:	Direct to receiving water _____	Within facility (sewer) _____	Storm drain _____	Wetlands _____	Other (describe): _____
b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:					
c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water: 1. For multiple discharges, number the discharges sequentially. 2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.					
d) Provide the state water quality classification of the receiving water _____					
e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water _____ cfs Please attach any calculation sheets used to support stream flow and dilution calculations.					
f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y____ N____ If yes, for which pollutant(s)? _____					
Is there a final TMDL? Y____ N____ If yes, for which pollutant(s)? _____					

6. ESA and NHPA Eligibility.

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

- a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?
A ____ B ____ C ____ D ____ E ____ F ____
- b) If you selected Criterion D or F, has consultation with the federal services been completed? Y ____ N ____ Underway ____
- c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is “not likely to adversely affect” listed species or critical habitat received? Y ____ N ____
- d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.
- e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?
1 ____ 2 ____ 3 ____
- f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

7. Supplemental information.

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility/Site Name:	160 Cambridgepark Drive
Operator signature:	<i>Kathryn K. Brinford</i>
Printed Name & Title:	Vice President of CPJV G.P. LLC, the sole general partner of Cambridge Park Apartments Limited Partnership. *on behalf of L.P.
Date:	11-13-12

Calculations

File No. 35060-041
Sheet 1 of 1
Date 29 SEP 2012
Computed By BRG
Checked By JRK

Client CAMBRIDGE PARK APARTMENTS LIMITED PARTNERSHIP
Project 160 CAMBRIDGE PARK DRIVE
Subject NPDES RGP NOI - DILUTION FACTOR

USGS STATION 01103025 (ALEWIFE BROOK NEAR ARLINGTON)
LOCATION: BROADWAY @ ALEWIFE BROOK

PER PROBABILITY PLOT, 7Q10 FLOW AT STATION 01103025
IS 2.1 CFS

ASSUME LINEAR RELATIONSHIP BETWEEN 7Q10 FLOW AND LENGTH
OF STREAM BETWEEN LITTLE POND + STATION 01103025

DISTANCE: LITTLE POND OUTFALL TO STATION 01103025
IS APPROXIMATELY 9000 FEET

LITTLE POND OUTFALL TO DISCHARGE POINT
IS APPROXIMATELY 4500 FEET

$$4500/9000 = 50\%$$

$$2.1 \text{ CFS} \times 0.5 = 1.05 \text{ CFS}$$

→ USE 1.0 CFS FOR
7Q10 @ DISCHARGE PT.

$$DF = \frac{Q_d + Q_s}{Q_d}$$

$$\begin{aligned} \text{ESTIMATE } Q_d &= 100 \text{ GPM} = 0.223 \text{ CFS} \\ Q_s &= 1.0 \text{ CFS} \end{aligned}$$

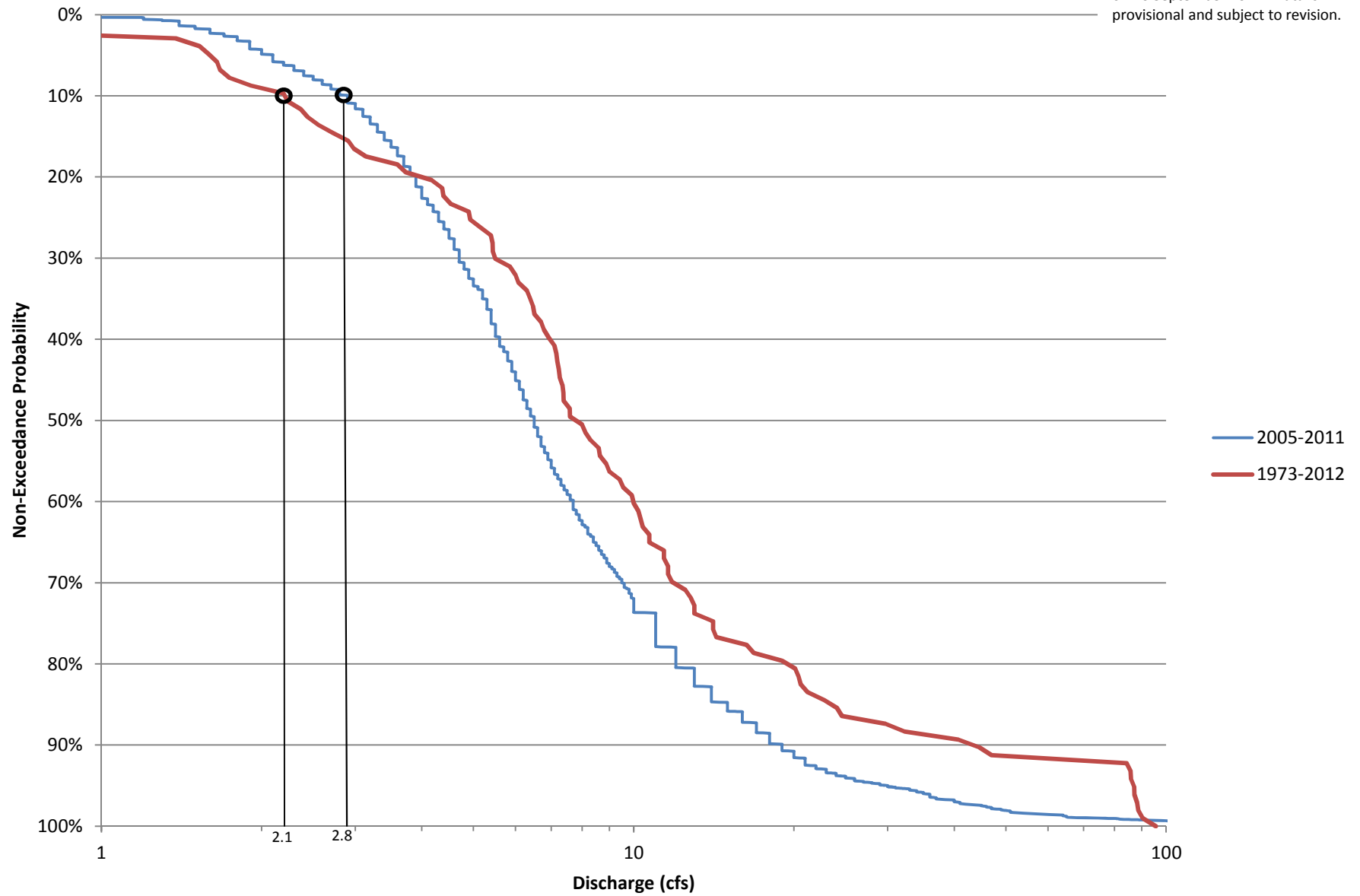
$$DF = (0.223 + 1.0) / 0.223 = \underline{5.5}$$

USE: $5 < DF < 10$

Alewife Brook near Arlington, MA

USGS 01103025

Data obtained from an automated U.S. Geological Survey database (<http://waterdata.usgs.gov/nwis>) on 20 September 2012. Data is provisional and subject to revision.



APPENDIX B

Best Management Practices Plan (BMPP)

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDATION GENERAL PERMIT
TEMPORARY CONSTRUCTION DEWATERING
160 CAMBRIDGEPARK DRIVE
CAMBRIDGE, MASSACHUSETTS**

Best Management Practices Plan

A Notice of Intent for a Remediation General Permit (RGP) under the National Pollutant Discharge Elimination System (NPDES) has been submitted to the US Environmental Protection Agency (EPA) in anticipation of temporary construction site dewatering planned to occur during proposed construction of a 4- to 5-story residential building with one level of at-grade parking at 160 Cambridgepark Drive in Cambridge, Massachusetts. This Best Management Practices Plan (BMPP) has been prepared as an Appendix to the RGP and will be posted at the site during the time period that temporary construction dewatering is occurring at the site.

Water Treatment and Management

Construction dewatering will be conducted from sumps located inside the proposed development area. The treatment system will be designed by the contractor. Prior to discharge, collected water will likely be routed through a sedimentation or bag filters, at a minimum, to remove suspended solids and undissolved chemical constituents. Supplemental pretreatment may be required to meet discharge criteria as shown in the Proposed Treatment System Schematic included in Figure 3. Supplemental pretreatment may include Oil/Water Separator, GAC Filter, and/or Ion Exchange. Construction dewatering under this RGP NOI will include piping and discharging to a storm drain located near the site. The drain travels east along Cambridgepark Drive and discharges from outfall "D45" to a drainage ditch leading to Alewife Brook.

Discharge Monitoring and Compliance

Regular sampling and testing will be conducted at the treated effluent as required by the RGP. This includes chemical testing required within the first month of discharging, and the monthly testing to be conducted through the end of the scheduled discharge.

Monitoring will include checking the condition of the treatment system, assessing the need for treatment system adjustments based on monitoring data, observing and recording daily flow rates and discharge quantities, and verifying the flow path of the discharged effluent.

The total monthly flow will be monitored by checking and documenting the flow through the flow meter to be installed on the system.

Monthly monitoring reports will be compiled and maintained at the site.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
REMEDATION GENERAL PERMIT
TEMPORARY CONSTRUCTION DEWATERING
160 CAMBRIDGE PARK DRIVE
CAMBRIDGE, MASSACHUSETTS**

System Maintenance

A number of methods will be used to minimize the potential for violations for the term of this permit. Scheduled regular maintenance of the treatment system will be conducted to verify proper operation. Regular maintenance will include checking the condition of the treatment system equipment such as the fractionization tanks, filters, hoses, pumps, and flow meters. Equipment will be monitored daily for potential issues or unscheduled maintenance requirements.

Employees who have direct or indirect responsibility for ensuring compliance with the RGP will be trained by the Operator.

Miscellaneous Items

Due to the nature of the excavation, planned erosion control measures and the nature of the site and surrounding infrastructure, run off into the site from other sources and run off from the site are not anticipated.

Site security for the treatment system can be covered within the overall site security plan.

No adverse affects of designated water uses of surrounding surface water bodies is anticipated. The Alewife Brook is the nearest surface water body to the site located approximately 0.15 miles from the construction activities on site. As mentioned earlier, the discharged effluent will be pumped directly to a storm drain located near the site and into existing below grade infrastructure.

Management of Treatment System Materials

No potential sources of pollutants are anticipated to impact the dewatering effluent during construction dewatering activities. Dewatering effluent will be pumped directly to the treatment system from the excavation with the use of hoses and sumps to minimize handling. The contractor will establish staging areas on the site for any equipment or materials storage which may be possible sources of pollution away from any dewatering activities.

Sediment from the fractionalization tank used in the treatment system will be characterized and disposed of as soil at an appropriate receiving facility in accordance with applicable laws and regulations. If used, Ion Exchange resin will be likely recycled and/or manifested to the appropriate receiving facility. Bag filters, if used, will be placed in drums and manifested for off-site disposal.

APPENDIX C

National Register of Historic Places and Massachusetts Historical Commission Documentation

NATIONAL PARK SERVICE
NATIONAL REGISTER
OF HISTORIC PLACES



Google earth



Massachusetts Historical Commission

William Francis Galvin, Secretary of the Commonwealth

[Home](#) | [Feedback](#) | [Contact Us](#)

[MHC Home](#)

Massachusetts Cultural Resource Information System **MACRIS**

Scanned forms and photos now available for selected towns!

The Massachusetts Cultural Resource Information System (MACRIS) allows you to search the Massachusetts Historical Commission database for information on historic properties and areas in the Commonwealth.

Users of the database should keep in mind that it does not include information on all historic properties and areas in Massachusetts, nor does it reflect all the information on file on historic properties and areas at the Massachusetts Historical Commission.

[Click here to begin your search of the MACRIS database.](#)



[Home](#) | [Search](#) | [Index](#) | [Feedback](#) | [Contact](#)

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Cambridge; Place: North Cambridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No.	Property Name	Street	Town	Year
CAM.101	Kingsley, Chester House	10 Chester St	Cambridge	1866
CAM.910	Fitchburg Railroad Signal Bridge	Fitchburg Railroad	Cambridge	1930
CAM.1383	Chadwick, Samuel E. House	10 Hollis St	Cambridge	1853
CAM.245	Henderson Carriage Repository	2067-2089 Massachusetts Ave	Cambridge	1892
CAM.247	Mead, Alpheus House	2200 Massachusetts Ave	Cambridge	1867
CAM.248	Snow, Daniel House	2210 Massachusetts Ave	Cambridge	1868
CAM.249	McLean, Isaac House	2218 Massachusetts Ave	Cambridge	1894
CAM.250	Farwell, R. H. Double House	2222-2224 Massachusetts Ave	Cambridge	1891
CAM.251	Saint John's Roman Catholic Church	2270 Massachusetts Ave	Cambridge	1904
CAM.301		59 Rice St	Cambridge	1847
CAM.306	Soule, Lawrence Porter House	11 Russell St	Cambridge	1879

Massachusetts Cultural Resource Information System

MACRIS

MACRIS Search Results

Search Criteria: Town(s): Cambridge; Place: Fresh Pond; Resource Type(s): Building, Area, Burial Ground, Structure, Object;

Inv. No.	Property Name	Street	Town	Year
CAM.AL	Fresh Pond		Cambridge	
CAM.AS	Metropolitan Park System of Greater Boston		Cambridge	
CAM.AX	Fresh Pond Parkway		Cambridge	
CAM.1365	Cambridge Home for the Aged and Infirm	650 Concord Ave	Cambridge	1928
CAM.919	Fresh Pond Lane over B & M Railroad	Fresh Pond Ln	Cambridge	1926
CAM.9014	Fresh Pond Parkway	Fresh Pond Pkwy	Cambridge	1899
CAM.9015	Fresh Pond Parkway - Concord Avenue Rotary Islands	Fresh Pond Pkwy	Cambridge	1928
CAM.904	Huron Avenue Bridge over B & M Railroad	Huron Ave	Cambridge	1892

APPENDIX D

Endangered Species Act Documentation



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
<http://www.fws.gov/newengland>



January 17, 2012

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

(<http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm>)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Mr. Anthony Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

MassDEP - Bureau of Waste Site Cleanup

Site Information:

160 CAMBRIDGE PARK DRIVE
160 CAMBRIDGE PARK DRIVE CAMBRIDGE, MA

NAD83 UTM Meters:

4695857mN, 323259mE (Zone: 19)

MCP Numerical Ranking System Map: 500 feet & 0.5 Mile Radii

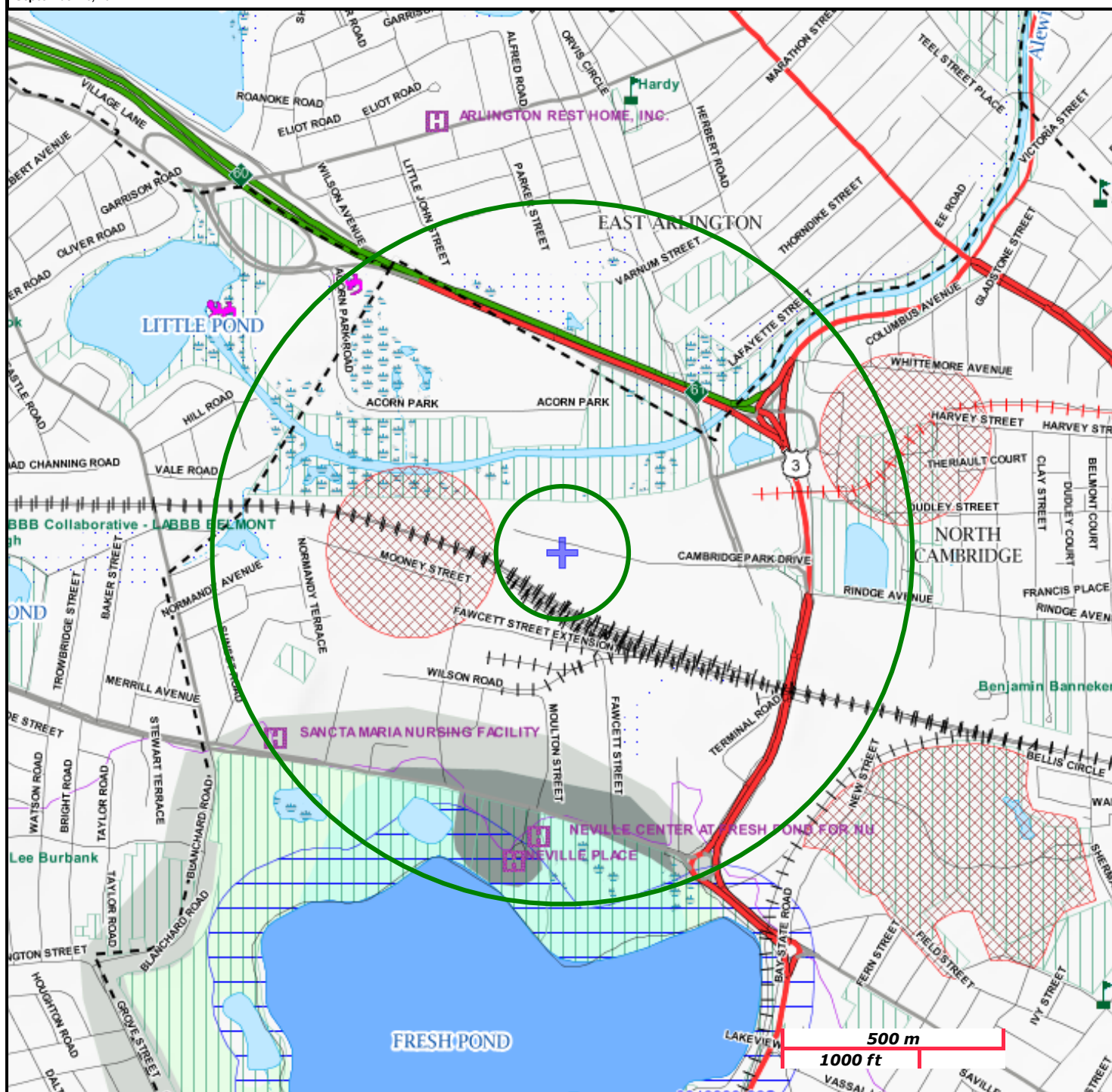
The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:
<http://www.mass.gov/mgis/>.



MassDEP

Commonwealth of Massachusetts
Department of Environmental Protection

September 10, 2012



Roads: Limited Access, Divided, Other Hwy, Major Road, Minor Road, Track, Trail

Boundaries: Town, County, DEP Region; Train; Powerline; Pipeline; Aqueduct

Basins: Major, PWS; Streams: Perennial, Intermittent, Man Made Shore, Dam

Aquifers: Medium Yield, High Yield, EPA Sole Source

Non Potential Drinking Water Source Area: Medium, High (Yield)

PWS Protection Areas: Zone II, IWPA, Zone A

Hydrography: Open Water, PWS Reservoir, Tidal Flat

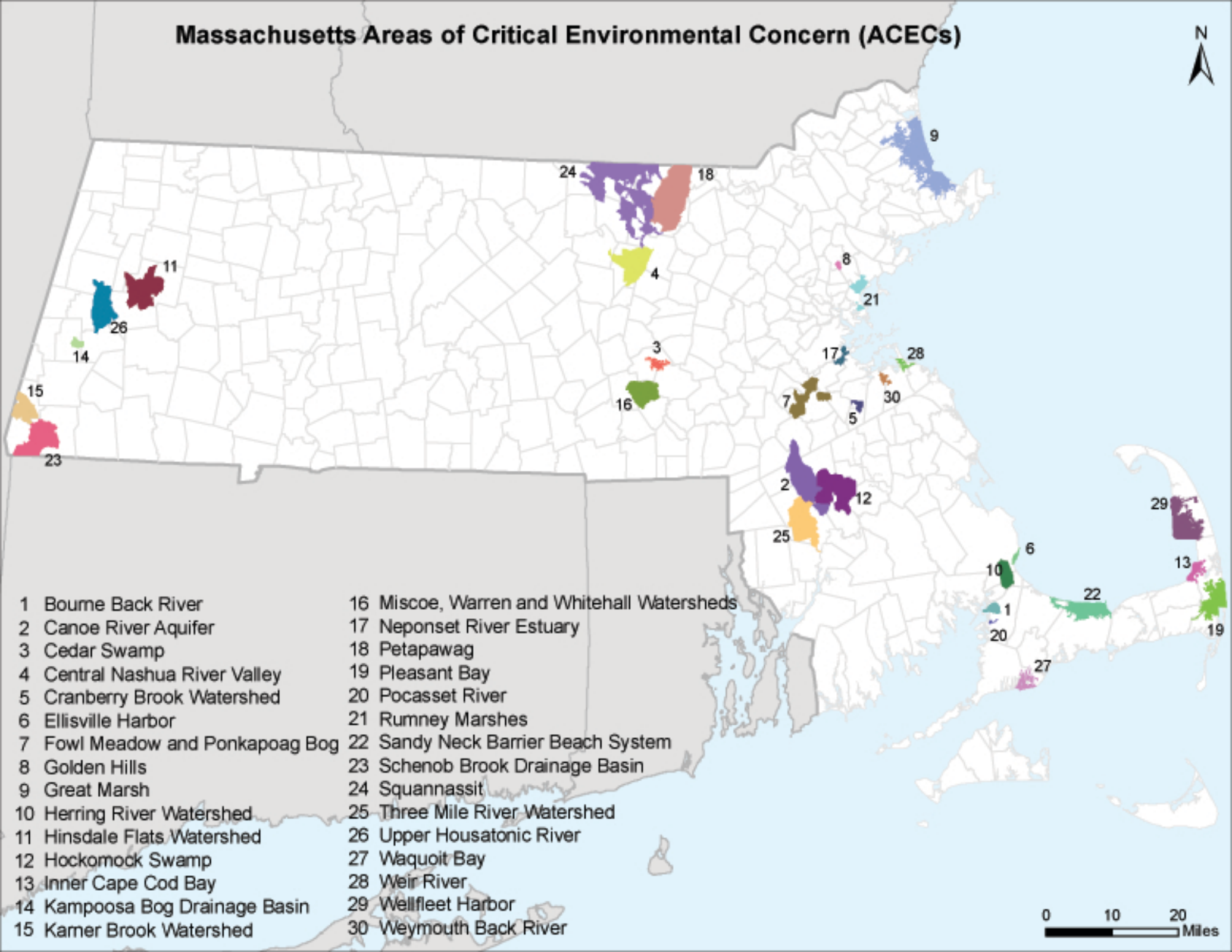
Wetlands: Freshwater, Saltwater, Cranberry Bog

FEMA 100yr Floodplain; Protected Open Space; ACEC

Est. Rare Wetland Wildlife Hab; Vernal Pool: Cert., Potential

Solid Waste Landfill; PWS: Com. GW, SW, Emerg., Non-Com.

Massachusetts Areas of Critical Environmental Concern (ACECs)



- | | |
|---------------------------------|--|
| 1 Bourne Back River | 16 Miscoe, Warren and Whitehall Watersheds |
| 2 Canoe River Aquifer | 17 Neponset River Estuary |
| 3 Cedar Swamp | 18 Petapawag |
| 4 Central Nashua River Valley | 19 Pleasant Bay |
| 5 Cranberry Brook Watershed | 20 Pocasset River |
| 6 Ellisville Harbor | 21 Rumney Marshes |
| 7 Fowl Meadow and Ponkapoag Bog | 22 Sandy Neck Barrier Beach System |
| 8 Golden Hills | 23 Schenob Brook Drainage Basin |
| 9 Great Marsh | 24 Squannassit |
| 10 Herring River Watershed | 25 Three Mile River Watershed |
| 11 Hinsdale Flats Watershed | 26 Upper Housatonic River |
| 12 Hockomock Swamp | 27 Waquoit Bay |
| 13 Inner Cape Cod Bay | 28 Weir River |
| 14 Kampoosa Bog Drainage Basin | 29 Wellfleet Harbor |
| 15 Karter Brook Watershed | 30 Weymouth Back River |

0 10 20 Miles

MASSACHUSETTS AREAS OF CRITICAL ENVIRONMENTAL CONCERN

November 2010

Total Approximate Acreage: 268,000 acres

Approximate acreage and designation date follow ACEC names below.

Bourne Back River

(1,850 acres, 1989) Bourne

Canoe River Aquifer and Associated Areas (17,200 acres, 1991) Easton, Foxborough, Mansfield, Norton, Sharon, and Taunton

Cedar Swamp

(1,650 acres, 1975) Hopkinton and Westborough

Central Nashua River Valley

(12,900 acres, 1996) Bolton, Harvard, Lancaster, and Leominster

Cranberry Brook Watershed

(1,050 acres, 1983) Braintree and Holbrook

Ellisville Harbor

(600 acres, 1980) Plymouth

Fowl Meadow and Ponkapoag Bog

(8,350 acres, 1992) Boston, Canton, Dedham, Milton, Norwood, Randolph, Sharon, and Westwood

Golden Hills

(500 acres, 1987) Melrose, Saugus, and Wakefield

**Great Marsh (originally designated as
Parker River/Essex Bay)**

(25,500 acres, 1979) Essex, Gloucester, Ipswich, Newbury, and Rowley

Herring River Watershed

(4,450 acres, 1991) Bourne and Plymouth

Hinsdale Flats Watershed

(14,500 acres, 1992) Dalton, Hinsdale, Peru, and Washington

Hockomock Swamp

(16,950 acres, 1990) Bridgewater, Easton, Norton, Raynham, Taunton, and West Bridgewater

Inner Cape Cod Bay

(2,600 acres, 1985) Brewster, Eastham, and Orleans

Kampoosa Bog Drainage Basin

(1,350 acres, 1995) Lee and Stockbridge

Karner Brook Watershed

(7,000 acres, 1992) Egremont and Mount Washington

Miscoe, Warren, and Whitehall Watersheds

(8,700 acres, 2000) Grafton, Hopkinton, and Upton

Neponset River Estuary

(1,300 acres, 1995) Boston, Milton, and Quincy

Petapawag

(25,680 acres, 2002) Ayer, Dunstable, Groton, Pepperell, and Tyngsborough

Pleasant Bay

(9,240 acres, 1987) Brewster, Chatham, Harwich, and Orleans

Pocasset River

(160 acres, 1980) Bourne

Rumney Marshes

(2,800 acres, 1988) Boston, Lynn, Revere, Saugus, and Winthrop

Sandy Neck Barrier Beach System

(9,130 acres, 1978) Barnstable and Sandwich

Schenob Brook Drainage Basin

(13,750 acres, 1990) Mount Washington and Sheffield

Squannassit

(37,420 acres, 2002) Ashby, Ayer, Groton, Harvard, Lancaster, Lunenburg, Pepperell, Shirley, and Townsend

Three Mile River Watershed

(14,280 acres, 2008) Dighton, Norton, Taunton

Upper Housatonic River

(12,280 acres, 2009) Lee, Lenox, Pittsfield, Washington

Waquoit Bay

(2,580 acres, 1979) Falmouth and Mashpee

Weir River

(950 acres, 1986) Cohasset, Hingham, and Hull

Wellfleet Harbor

(12,480 acres, 1989) Eastham, Truro, and Wellfleet

Weymouth Back River

(800 acres, 1982) Hingham and Weymouth

Towns with ACECs within their Boundaries

November 2010

TOWN	ACEC	TOWN	ACEC
Ashby	Squannassit	Mt. Washington	Karner Brook Watershed
Ayer	Petapawag		Schenob Brook
	Squannassit	Newbury	Great Marsh
Barnstable	Sandy Neck Barrier Beach System	Norton	Hockomock Swamp
Bolton	Central Nashua River Valley		Canoe River Aquifer
Boston	Rumney Marshes		Three Mile River Watershed
	Fowl Meadow and Ponkapoag Bog	Norwood	Fowl Meadow and Ponkapoag Bog
	Neponset River Estuary	Orleans	Inner Cape Cod Bay
Bourne	Pocasset River		Pleasant Bay
	Bourne Back River	Pepperell	Petapawag
	Herring River Watershed		Squannassit
Braintree	Cranberry Brook Watershed	Peru	Hinsdale Flats Watershed
Brewster	Pleasant Bay	Pittsfield	Upper Housatonic River
	Inner Cape Cod Bay	Plymouth	Herring River Watershed
Bridgewater	Hockomock Swamp		Ellisville Harbor
Canton	Fowl Meadow and Ponkapoag Bog	Quincy	Neponset River Estuary
Chatham	Pleasant Bay	Randolph	Fowl Meadow and Ponkapoag Bog
Cohasset	Weir River	Raynham	Hockomock Swamp
Dalton	Hinsdale Flats Watershed	Revere	Rumney Marshes
Dedham	Fowl Meadow and Ponkapoag Bog	Rowley	Great Marsh
Dighton	Three Mile River Watershed	Sandwich	Sandy Neck Barrier Beach System
Dunstable	Petapawag	Saugus	Rumney Marshes
Eastham	Inner Cape Cod Bay		Golden Hills
	Wellfleet Harbor	Sharon	Canoe River Aquifer
Easton	Canoe River Aquifer		Fowl Meadow and Ponkapoag Bog
	Hockomock Swamp	Sheffield	Schenob Brook
Egremont	Karner Brook Watershed	Shirley	Squannassit
Essex	Great Marsh	Stockbridge	Kampoosa Bog Drainage Basin
Falmouth	Waquoit Bay	Taunton	Hockomock Swamp
Foxborough	Canoe River Aquifer		Canoe River Aquifer
Gloucester	Great Marsh		Three Mile River Watershed
Grafton	Miscoe-Warren-Whitehall Watersheds	Truro	Wellfleet Harbor
		Townsend	Squannassit
Groton	Petapawag	Tyngsborough	Petapawag
	Squannassit	Upton	Miscoe-Warren-Whitehall Watersheds
Harvard	Central Nashua River Valley		
	Squannassit	Wakefield	Golden Hills
Harwich	Pleasant Bay	Washington	Hinsdale Flats Watershed
Hingham	Weir River		Upper Housatonic River
	Weymouth Back River	Wellfleet	Wellfleet Harbor
Hinsdale	Hinsdale Flats Watershed	W Bridgewater	Hockomock Swamp
Holbrook	Cranberry Brook Watershed	Westborough	Cedar Swamp
Hopkinton	Miscoe-Warren-Whitehall Watersheds	Westwood	Fowl Meadow and Ponkapoag Bog
		Weymouth	Weymouth Back River
	Cedar Swamp	Winthrop	Rumney Marshes
Hull	Weir River		
Ipswich	Great Marsh		
Lancaster	Central Nashua River Valley		
	Squannassit		
Lee	Kampoosa Bog Drainage Basin		
	Upper Housatonic River		
Lenox	Upper Housatonic River		
Leominster	Central Nashua River Valley		
Lunenburg	Squannassit		
Lynn	Rumney Marshes		
Mansfield	Canoe River Aquifer		
Mashpee	Waquoit Bay		
Melrose	Golden Hills		
Milton	Fowl Meadow and Ponkapoag Bog		
	Neponset River Estuary		

The Official Website of the Department of Fish and Game (DFG)

Department of Fish and Game

Commissioner Mary B. Griffin

[DFG Home](#) [Mass.Gov Home](#) [State Agencies](#) [State Online Services](#)

MassWildlife
Massachusetts Division of Fisheries & Wildlife
Wayne F. MacCallum, Director

Natural Heritage & Endangered Species
[Home](#) [Recreation](#) [Wildlife](#) [Fisheries](#) [Natural Heritage](#) [Habitat](#) [Education](#)



Rare Species by Town

MESA (Massachusetts Endangered Species Act) and Federal Status

Quick Links

- » [Town Index](#)
- » [MESA List](#)
- » [Contact Us](#)

E = Endangered T = Threatened SC = Special Concern

Most Recent Observation

This field represents the most recent observation of that species in a town. However, because they are rare, many MESA-listed species are difficult to detect even when they are present. Natural Heritage does not have the resources to be able to conduct methodical species surveys in each town on a regular basis. Therefore, the fact that the 'Most Recent Observation' recorded for a species may be several years old should not be interpreted as meaning that the species no longer occurs in a town. However, Natural Heritage regards records older than twenty-five years historic.

Click on a town below to view MESA-listed species for that town. To print the species for a particular town, highlight the species using your mouse, go to Print under the File Menu, click on 'Selection' under 'Print Range' and click OK.

For more information about a particular species, view the list of [Natural Heritage Fact Sheets](#).

These data were extracted from the database of the Natural Heritage and Endangered Species Program in September 2009.

[Cambridge](#) | [Canton](#) | [Carlisle](#) | [Carver](#) | [Charlemont](#) | [Charlton](#) | [Chatham](#) | [Chelmsford](#) | [Chelsea](#) | [Cheshire](#) | [Chester](#) | [Chesterfield](#) | [Chicopee](#) | [Chilmark](#) | [Clarksburg](#) | [Clinton](#) | [Cohasset](#) | [Colrain](#) | [Concord](#) | [Conway](#) | [Cummington](#)

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
CAMBRIDGE	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1917
CAMBRIDGE	Amphibian	Scaphiopus holbrookii	Eastern Spadefoot	T		1892
CAMBRIDGE	Beetle	Cicindela duodecimguttata	Twelve-spotted Tiger Beetle	SC		1932
CAMBRIDGE	Bird	Ammodramus henslowii	Henslow's Sparrow	E		1871
CAMBRIDGE	Bird	Botaurus lentiginosus	American Bittern	E		1906
CAMBRIDGE	Bird	Cistothorus platensis	Sedge Wren	F		1840

CAMBRIDGE	Bird	Cistothorus platensis	Sedge Wren	E	1890
CAMBRIDGE	Bird	Gallinula chloropus	Common Moorhen	SC	1890
CAMBRIDGE	Bird	Ixobrychus exilis	Least Bittern	E	1890
CAMBRIDGE	Bird	Tyto alba	Barn Owl	SC	Historic
CAMBRIDGE	Butterfly/Moth	Eacles imperialis	Imperial Moth	T	Historic
CAMBRIDGE	Fish	Notropis bifrenatus	Bridle Shiner	SC	1928
CAMBRIDGE	Mussel	Ligumia nasuta	Eastern Pondmussel	SC	1940
CAMBRIDGE	Reptile	Glyptemys insculpta	Wood Turtle	SC	Historic
CAMBRIDGE	Reptile	Terrapene carolina	Eastern Box Turtle	SC	1892
CAMBRIDGE	Segmented Worm	Macrobdella sesteria	New England Medicinal Leech	SC	1800s
CAMBRIDGE	Vascular Plant	Carex gracilescens	Slender Woodland Sedge	E	1891
CAMBRIDGE	Vascular Plant	Cyperus engelmannii	Engelmann's Umbrella-sedge	T	2007
CAMBRIDGE	Vascular Plant	Gentiana andrewsii	Andrews' Bottle Gentian	E	1854
CAMBRIDGE	Vascular Plant	Isoetes lacustris	Lake Quillwort	E	Historic
CAMBRIDGE	Vascular Plant	Platanthera flava var. herbiola	Pale Green Orchis	T	Historic
CAMBRIDGE	Vascular Plant	Potamogeton friesii	Fries' Pondweed	E	1880
CAMBRIDGE	Vascular Plant	Scirpus longii	Long's Bulrush	T	1913
CAMBRIDGE	Vascular Plant	Suaeda calceoliformis	American Sea-blite	SC	1912
CAMBRIDGE	Vascular Plant	Viola brittoniana	Britton's Violet	T	1843

Town	Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
CANTON	Amphibian	Ambystoma laterale	Blue-spotted Salamander	SC		1978
CANTON	Bird	Cistothorus platensis	Sedge Wren	E		1893
CANTON	Butterfly/Moth	Callophrys hesseli	Hessel's Hairstreak	SC		2001
CANTON	Butterfly/Moth	Chaetagnathia cerata	Waxed Sallow Moth	SC		1987
CANTON	Butterfly/Moth	Metarranthia pilosaria	Coastal Swamp Metarranthia Moth	SC		1994
CANTON	Butterfly/Moth	Papaipema appassianata	Pitcher Plant Borer Moth	T		2002
CANTON	Butterfly/Moth	Satyrus favonius	Oak Hairstreak	SC		2004
CANTON	Dragonfly/Damselfly	Enallagma daeckii	Attenuated Bluet	SC		2008
CANTON	Dragonfly/Damselfly	Enallagma laterale	New England Bluet	SC		2008
CANTON	Dragonfly/Damselfly	Enallagma pictum	Scarlet Bluet	T		2009
CANTON	Reptile	Emydoidea blandingii	Blanding's Turtle	T		1994
CANTON	Reptile	Terrapene carolina	Eastern Box Turtle	SC		1917
CANTON	Vascular Plant	Ageratina aromatica	Lesser Snakeroot	E		1895
CANTON	Vascular Plant	Amelanchier nantucketensis	Nantucket Shadbush	SC		2009
CANTON	Vascular Plant	Carex glaucoidea	Glaucous Sedge	E		1901
CANTON	Vascular Plant	Desmodium cuspidatum	Large-bracted Tick-trefoil	T		1889
CANTON	Vascular Plant	Eriophorum gracile	Slender Cottongrass	T		1892
CANTON	Vascular Plant	Liatris scariosa var.	New England Blazing Star	SC		1908

APPENDIX E

City of Cambridge Dewatering Permit Application



PERMIT TO DEWATER

Location:

Owner:

Contractor:

Temporary ☒

Permanent ☐

The property owner, agrees to hold harmless and indemnify the City of Cambridge for any liability on the part of the City directly or indirectly arising out of the dewatering operation.

The issuance of this permit is based in part in the submission packet of the applicant with documentation as follows:

In addition, the application has been reviewed by the City under third party agreement as documented in the following reports:

All activities conducted in conjunction with the issuance of this permit must be in accordance with the provisions of the aforementioned reports. Any deviations in conditions must be reported to and approved by the Commissioner of Public Works.

This permit is in addition to any other street permit issued by the Department in connection with any street excavation or obstruction; and all conditions as specified in the Discharge Permit for Dewatering.

For the entire period of time the groundwater is being discharged to a storm drain, the property owner shall provide copies of each Discharge Monitoring Report Form submitted to the EPA, pursuant to the owner's discharge permit.

If in the future the EPA requires the City of Cambridge to bring existing stormwater drainage into compliance with EPA quality standards, as a condition to the continuation of discharge of that stormwater (also including groundwater) into an EPA regulated system into which the (property owner) drains, the owner will agree to maintain its water discharge with such EPA water quality standards.

The property owner and contractor shall at all times meet the conditions specified in the requisite legal agreement/affidavits.

All groundwater pumped from the work shall be disposed of without damage to pavements, other surfaces or property.

Where material or debris has washed or flowed into or has been placed in existing gutters, drains, pipes or structures, such material or debris shall be entirely removed and satisfactorily disposed of by the

Contractor during the progress of work as directed by the Public Works Department.

Any flooding or damage of property and possessions caused by siltation of existing gutters, pipes or structures shall be the responsibility of the Contractor.

Provisions shall be made to insure that no material, water or solid, will freeze on any pavement or in any location which will cause inconvenience or hazard to the general public.

Upon completion of the work, existing gutters, drains, pipes and structures shall be (bucket) cleaned and material disposed of satisfactorily prior to release by the Public Works Department.

Any permit issued by the City of Cambridge shall be revoked upon transfer of any ownership interest unless and until subsequent owner(s) or parties of interest agree to the foregoing terms.

This permit shall remain in effect for one year and shall be renewable thereafter at the agreement of the parties.

The following special conditions as set forth below are part of the permit.

Not Applicable

City Manager

Kathy K. Binford
Property Manager: Corporate Entity
President, General Partner or Trustee
Trustee with Instrument of Authority

KATHY K. BINFORD
VICE PRESIDENT

11-13-12

Date

Date

City Solicitor

HANOVER R.S. Construction LLC

Contractor

By: Kathy K. Binford
11-13-12

Date

Date

KATHY K. BINFORD
VICE PRESIDENT

Commissioner of Public

Contractor

Date

Date

CC: Engineering
Supervisor of Sewer Maintenance and Engineering
Superintendent of Streets
Commissioner of Inspectional Services

APPENDIX F

Laboratory Data Reports



ANALYTICAL REPORT

Lab Number:	L1214029
Client:	Haley & Aldrich, Inc. 465 Medford St S-2200 Charlestown, MA 02129-1400
ATTN:	Todd Butler
Phone:	(617) 886-7424
Project Name:	160 CAMBRIDGE PARK DRIVE
Project Number:	35060-041
Report Date:	08/10/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1214029-01	2012_0806_NPDES1	CAMBRIDGE, MA	08/06/12 10:40

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Case Narrative (continued)

Sample Receipt

The samples were Field Filtered for Dissolved Metals only.

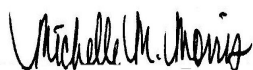
Containers for Semivolatile Organics were not received for the "2012_0806_NPDES1" sample, but were listed on the chain of custody. The analysis was canceled at the client's request.

Dissolved Metals

The WG553874-4 MS recovery, performed on L1214029-01, is outside the acceptance criteria for Mercury (138%). A post digestion spike was performed with an acceptable recovery of 103%.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 08/10/12

ORGANICS

VOLATILES

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01
Client ID: 2012_0806_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water
Analytical Method: 1,8260B
Analytical Date: 08/09/12 15:48
Analyst: MM

Date Collected: 08/06/12 10:40
Date Received: 08/06/12
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	3.0	--	1
1,1-Dichloroethane	ND		ug/l	0.75	--	1
Chloroform	ND		ug/l	0.75	--	1
Carbon tetrachloride	ND		ug/l	0.50	--	1
1,2-Dichloropropane	ND		ug/l	1.8	--	1
Dibromochloromethane	ND		ug/l	0.50	--	1
1,1,2-Trichloroethane	ND		ug/l	0.75	--	1
Tetrachloroethene	ND		ug/l	0.50	--	1
Chlorobenzene	ND		ug/l	0.50	--	1
Trichlorofluoromethane	ND		ug/l	2.5	--	1
1,2-Dichloroethane	ND		ug/l	0.50	--	1
1,1,1-Trichloroethane	ND		ug/l	0.50	--	1
Bromodichloromethane	ND		ug/l	0.50	--	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	--	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	--	1
1,1-Dichloropropene	ND		ug/l	2.5	--	1
Bromoform	ND		ug/l	2.0	--	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Benzene	ND		ug/l	0.50	--	1
Toluene	ND		ug/l	0.75	--	1
Ethylbenzene	ND		ug/l	0.50	--	1
Chloromethane	ND		ug/l	2.5	--	1
Bromomethane	ND		ug/l	1.0	--	1
Vinyl chloride	ND		ug/l	1.0	--	1
Chloroethane	ND		ug/l	1.0	--	1
1,1-Dichloroethene	ND		ug/l	0.50	--	1
trans-1,2-Dichloroethene	ND		ug/l	0.75	--	1
Trichloroethene	ND		ug/l	0.50	--	1
1,2-Dichlorobenzene	ND		ug/l	2.5	--	1
1,3-Dichlorobenzene	ND		ug/l	2.5	--	1
1,4-Dichlorobenzene	ND		ug/l	2.5	--	1

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01

Date Collected: 08/06/12 10:40

Client ID: 2012_0806_NPDES1

Date Received: 08/06/12

Sample Location: CAMBRIDGE, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	1.0	--	1
p/m-Xylene	ND		ug/l	1.0	--	1
o-Xylene	ND		ug/l	1.0	--	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	--	1
Dibromomethane	ND		ug/l	5.0	--	1
1,4-Dichlorobutane	ND		ug/l	5.0	--	1
1,2,3-Trichloropropane	ND		ug/l	5.0	--	1
Styrene	ND		ug/l	1.0	--	1
Dichlorodifluoromethane	ND		ug/l	5.0	--	1
Acetone	9.0		ug/l	5.0	--	1
Carbon disulfide	ND		ug/l	5.0	--	1
2-Butanone	ND		ug/l	5.0	--	1
Vinyl acetate	ND		ug/l	5.0	--	1
4-Methyl-2-pentanone	ND		ug/l	5.0	--	1
2-Hexanone	ND		ug/l	5.0	--	1
Ethyl methacrylate	ND		ug/l	5.0	--	1
Acrylonitrile	ND		ug/l	5.0	--	1
Bromochloromethane	ND		ug/l	2.5	--	1
Tetrahydrofuran	ND		ug/l	5.0	--	1
2,2-Dichloropropane	ND		ug/l	2.5	--	1
1,2-Dibromoethane	ND		ug/l	2.0	--	1
1,3-Dichloropropane	ND		ug/l	2.5	--	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--	1
Bromobenzene	ND		ug/l	2.5	--	1
n-Butylbenzene	ND		ug/l	0.50	--	1
sec-Butylbenzene	ND		ug/l	0.50	--	1
tert-Butylbenzene	ND		ug/l	2.5	--	1
o-Chlorotoluene	ND		ug/l	2.5	--	1
p-Chlorotoluene	ND		ug/l	2.5	--	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Isopropylbenzene	ND		ug/l	0.50	--	1
p-Isopropyltoluene	ND		ug/l	0.50	--	1
Naphthalene	5.6		ug/l	2.5	--	1
n-Propylbenzene	ND		ug/l	0.50	--	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--	1

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01

Date Collected: 08/06/12 10:40

Client ID: 2012_0806_NPDES1

Date Received: 08/06/12

Sample Location: CAMBRIDGE, MA

Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

Volatile Organics by GC/MS - Westborough Lab

trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--	1
Ethyl ether	ND		ug/l	2.5	--	1
Isopropyl Ether	ND		ug/l	2.0	--	1
Tert-Butyl Alcohol	ND		ug/l	10	--	1
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--	1
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	102		70-130

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01

Date Collected: 08/06/12 10:40

Client ID: 2012_0806_NPDES1

Date Received: 08/06/12

Sample Location: CAMBRIDGE, MA

Field Prep: See Narrative

Matrix: Water

Analytical Method: 1,8260B(M)

Analytical Date: 08/09/12 15:48

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS-SIM - Westborough Lab						
1,4-Dioxane	ND		ug/l	3.0	--	1

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01

Date Collected: 08/06/12 10:40

Client ID: 2012_0806_NPDES1

Date Received: 08/06/12

Sample Location: CAMBRIDGE, MA

Field Prep: See Narrative

Matrix: Water

Analytical Method: 14,504.1

Analytical Date: 08/09/12 13:04

Analyst: SS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Pesticides by GC - Westborough Lab						
1,2-Dibromoethane	ND		ug/l	0.010	--	1

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 14,504.1

Analytical Date: 08/09/12 12:02

Analyst: SS

Parameter	Result	Qualifier	Units	RL	MDL
Pesticides by GC - Westborough Lab for sample(s): 01 Batch: WG553855-1					
1,2-Dibromoethane	ND		ug/l	0.010	--

Project Name: 160 CAMBRIDGE PARK DRIVE

Lab Number: L1214029

Project Number: 35060-041

Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260B
 Analytical Date: 08/09/12 07:06
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG553860-3					
Methylene chloride	ND		ug/l	3.0	--
1,1-Dichloroethane	ND		ug/l	0.75	--
Chloroform	ND		ug/l	0.75	--
Carbon tetrachloride	ND		ug/l	0.50	--
1,2-Dichloropropane	ND		ug/l	1.8	--
Dibromochloromethane	ND		ug/l	0.50	--
1,1,2-Trichloroethane	ND		ug/l	0.75	--
2-Chloroethylvinyl ether	ND		ug/l	10	--
Tetrachloroethene	ND		ug/l	0.50	--
Chlorobenzene	ND		ug/l	0.50	--
Trichlorofluoromethane	ND		ug/l	2.5	--
1,2-Dichloroethane	ND		ug/l	0.50	--
1,1,1-Trichloroethane	ND		ug/l	0.50	--
Bromodichloromethane	ND		ug/l	0.50	--
trans-1,3-Dichloropropene	ND		ug/l	0.50	--
cis-1,3-Dichloropropene	ND		ug/l	0.50	--
1,1-Dichloropropene	ND		ug/l	2.5	--
Bromoform	ND		ug/l	2.0	--
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	--
Benzene	ND		ug/l	0.50	--
Toluene	ND		ug/l	0.75	--
Ethylbenzene	ND		ug/l	0.50	--
Chloromethane	ND		ug/l	2.5	--
Bromomethane	ND		ug/l	1.0	--
Vinyl chloride	ND		ug/l	1.0	--
Chloroethane	ND		ug/l	1.0	--
1,1-Dichloroethene	ND		ug/l	0.50	--
trans-1,2-Dichloroethene	ND		ug/l	0.75	--
Trichloroethene	ND		ug/l	0.50	--
1,2-Dichlorobenzene	ND		ug/l	2.5	--
1,3-Dichlorobenzene	ND		ug/l	2.5	--

Project Name: 160 CAMBRIDGE PARK DRIVE

Lab Number: L1214029

Project Number: 35060-041

Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260B
 Analytical Date: 08/09/12 07:06
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG553860-3					
1,4-Dichlorobenzene	ND		ug/l	2.5	--
Methyl tert butyl ether	ND		ug/l	1.0	--
p/m-Xylene	ND		ug/l	1.0	--
o-Xylene	ND		ug/l	1.0	--
cis-1,2-Dichloroethene	ND		ug/l	0.50	--
Dibromomethane	ND		ug/l	5.0	--
1,4-Dichlorobutane	ND		ug/l	5.0	--
Iodomethane	ND		ug/l	5.0	--
1,2,3-Trichloropropane	ND		ug/l	5.0	--
Styrene	ND		ug/l	1.0	--
Dichlorodifluoromethane	ND		ug/l	5.0	--
Acetone	ND		ug/l	5.0	--
Carbon disulfide	ND		ug/l	5.0	--
2-Butanone	ND		ug/l	5.0	--
Vinyl acetate	ND		ug/l	5.0	--
4-Methyl-2-pentanone	ND		ug/l	5.0	--
2-Hexanone	ND		ug/l	5.0	--
Ethyl methacrylate	ND		ug/l	5.0	--
Acrolein	ND		ug/l	5.0	--
Acrylonitrile	ND		ug/l	5.0	--
Bromochloromethane	ND		ug/l	2.5	--
Tetrahydrofuran	ND		ug/l	5.0	--
2,2-Dichloropropane	ND		ug/l	2.5	--
1,2-Dibromoethane	ND		ug/l	2.0	--
1,3-Dichloropropane	ND		ug/l	2.5	--
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	--
Bromobenzene	ND		ug/l	2.5	--
n-Butylbenzene	ND		ug/l	0.50	--
sec-Butylbenzene	ND		ug/l	0.50	--
tert-Butylbenzene	ND		ug/l	2.5	--
o-Chlorotoluene	ND		ug/l	2.5	--

Project Name: 160 CAMBRIDGE PARK DRIVE

Lab Number: L1214029

Project Number: 35060-041

Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260B
 Analytical Date: 08/09/12 07:06
 Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG553860-3					
p-Chlorotoluene	ND		ug/l	2.5	--
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Isopropylbenzene	ND		ug/l	0.50	--
p-Isopropyltoluene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	2.5	--
n-Propylbenzene	ND		ug/l	0.50	--
1,2,3-Trichlorobenzene	ND		ug/l	2.5	--
1,2,4-Trichlorobenzene	ND		ug/l	2.5	--
1,3,5-Trimethylbenzene	ND		ug/l	2.5	--
1,3,5-Trichlorobenzene	ND		ug/l	2.0	--
1,2,4-Trimethylbenzene	ND		ug/l	2.5	--
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	--
Halothane	ND		ug/l	2.5	--
Ethyl ether	ND		ug/l	2.5	--
Methyl Acetate	ND		ug/l	10	--
Ethyl Acetate	ND		ug/l	10	--
Isopropyl Ether	ND		ug/l	2.0	--
Cyclohexane	ND		ug/l	10	--
Tert-Butyl Alcohol	ND		ug/l	10	--
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	--
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/l	10	--
Methyl cyclohexane	ND		ug/l	10	--
p-Diethylbenzene	ND		ug/l	2.0	--
4-Ethyltoluene	ND		ug/l	2.0	--
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	--

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260B

Analytical Date: 08/09/12 07:06

Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG553860-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	101		70-130

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**Method Blank Analysis**
Batch Quality Control

Analytical Method: 1,8260B(M)
Analytical Date: 08/09/12 07:06
Analyst: MM

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG553866-3					
1,4-Dioxane	ND		ug/l	3.0	--

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 Batch: WG553855-2								
1,2-Dibromoethane	94		-		70-130	-		20

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG553860-1 WG553860-2								
Methylene chloride	90		95		70-130	5		20
1,1-Dichloroethane	97		103		70-130	6		20
Chloroform	97		97		70-130	0		20
Carbon tetrachloride	92		100		63-132	8		20
1,2-Dichloropropane	100		102		70-130	2		20
Dibromochloromethane	83		91		63-130	9		20
1,1,2-Trichloroethane	95		98		70-130	3		20
2-Chloroethylvinyl ether	94		93		70-130	1		20
Tetrachloroethene	97		92		70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG553860-1 WG553860-2								
Chlorobenzene	98		94		75-130	4		25
Trichlorofluoromethane	97		104		62-150	7		20
1,2-Dichloroethane	98		100		70-130	2		20
1,1,1-Trichloroethane	94		98		67-130	4		20
Bromodichloromethane	90		100		67-130	11		20
trans-1,3-Dichloropropene	92		94		70-130	2		20
cis-1,3-Dichloropropene	91		96		70-130	5		20
1,1-Dichloropropene	97		99		70-130	2		20
Bromoform	76		91		54-136	18		20
1,1,2,2-Tetrachloroethane	95		97		67-130	2		20
Benzene	99		96		70-130	3		25
Toluene	95		96		70-130	1		25
Ethylbenzene	98		94		70-130	4		20
Chloromethane	93		102		64-130	9		20
Bromomethane	100		114		39-139	13		20
Vinyl chloride	97		102		55-140	5		20
Chloroethane	100		102		55-138	2		20
1,1-Dichloroethene	97		105		61-145	8		25
trans-1,2-Dichloroethene	96		100		70-130	4		20
Trichloroethene	96		100		70-130	4		25
1,2-Dichlorobenzene	96		96		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG553860-1 WG553860-2								
1,3-Dichlorobenzene	95		94		70-130	1		20
1,4-Dichlorobenzene	95		95		70-130	0		20
Methyl tert butyl ether	98		101		63-130	3		20
p/m-Xylene	95		92		70-130	3		20
o-Xylene	96		92		70-130	4		20
cis-1,2-Dichloroethene	100		103		70-130	3		20
Dibromomethane	96		104		70-130	8		20
1,4-Dichlorobutane	95		98		70-130	3		20
1,2,3-Trichloropropane	93		100		64-130	7		20
Styrene	96		94		70-130	2		20
Dichlorodifluoromethane	96		98		36-147	2		20
Acetone	91		89		58-148	2		20
Carbon disulfide	80		98		51-130	20		20
2-Butanone	103		106		63-138	3		20
Vinyl acetate	90		97		70-130	7		20
4-Methyl-2-pentanone	89		96		59-130	8		20
2-Hexanone	96		93		57-130	3		20
Ethyl methacrylate	93		96		70-130	3		20
Acrylonitrile	88		99		70-130	12		20
Bromochloromethane	98		102		70-130	4		20
Tetrahydrofuran	94		102		58-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG553860-1 WG553860-2								
2,2-Dichloropropane	96		99		63-133	3		20
1,2-Dibromoethane	97		93		70-130	4		20
1,3-Dichloropropane	97		95		70-130	2		20
1,1,1,2-Tetrachloroethane	89		92		64-130	3		20
Bromobenzene	94		94		70-130	0		20
n-Butylbenzene	98		99		53-136	1		20
sec-Butylbenzene	94		95		70-130	1		20
tert-Butylbenzene	93		96		70-130	3		20
o-Chlorotoluene	96		98		70-130	2		20
p-Chlorotoluene	95		96		70-130	1		20
1,2-Dibromo-3-chloropropane	70		94		41-144	29	Q	20
Hexachlorobutadiene	98		98		63-130	0		20
Isopropylbenzene	96		97		70-130	1		20
p-Isopropyltoluene	93		94		70-130	1		20
Naphthalene	97		103		70-130	6		20
n-Propylbenzene	95		97		69-130	2		20
1,2,3-Trichlorobenzene	99		100		70-130	1		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	96		95		64-130	1		20
1,2,4-Trimethylbenzene	89		88		70-130	1		20
trans-1,4-Dichloro-2-butene	92		100		70-130	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG553860-1 WG553860-2								
Ethyl ether	93		103		59-134	10		20
Methyl Acetate	104		113		70-130	8		20
Ethyl Acetate	89		98		70-130	10		20
Isopropyl Ether	93		99		70-130	6		20
Cyclohexane	92		96		70-130	4		20
tert-Butyl Alcohol	96		104		70-130	8		20
Ethyl-Tert-Butyl-Ether	93		101		70-130	8		20
Tertiary-Amyl Methyl Ether	97		97		66-130	0		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	96		103		70-130	7		20
Methyl cyclohexane	98		96		70-130	2		20
1,4-Diethylbenzene	92		93		70-130	1		20
4-Ethyltoluene	95		93		70-130	2		20
1,2,4,5-Tetramethylbenzene	92		94		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	98		101		70-130
Toluene-d8	101		97		70-130
4-Bromofluorobenzene	99		104		70-130
Dibromofluoromethane	104		104		70-130

Lab Control Sample Analysis
Batch Quality Control**Project Name:** 160 CAMBRIDGE PARK DRIVE**Project Number:** 35060-041**Lab Number:** L1214029**Report Date:** 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG553866-1 WG553866-2								
1,4-Dioxane	82		85		70-130	4		25

Matrix Spike Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Pesticides by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553855-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
1,2-Dibromoethane	ND	0.244	0.232	95		-	-		70-130	-		20

PCBS

Project Name: 160 CAMBRIDGE PARK DRIVE**Lab Number:** L1214029**Project Number:** 35060-041**Report Date:** 08/10/12**SAMPLE RESULTS**

Lab ID: L1214029-01
Client ID: 2012_0806_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water
Analytical Method: 5,608
Analytical Date: 08/07/12 17:45
Analyst: KB

Date Collected: 08/06/12 10:40
Date Received: 08/06/12
Field Prep: See Narrative
Extraction Method: EPA 608
Extraction Date: 08/07/12 04:18
Cleanup Method1: EPA 3665A
Cleanup Date1: 08/07/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 08/07/12

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Polychlorinated Biphenyls by GC - Westborough Lab						
Aroclor 1016	ND		ug/l	0.250	--	1
Aroclor 1221	ND		ug/l	0.250	--	1
Aroclor 1232	ND		ug/l	0.250	--	1
Aroclor 1242	ND		ug/l	0.250	--	1
Aroclor 1248	ND		ug/l	0.250	--	1
Aroclor 1254	ND		ug/l	0.250	--	1
Aroclor 1260	ND		ug/l	0.250	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		30-150
Decachlorobiphenyl	52		30-150

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 5,608
Analytical Date: 08/07/12 16:56
Analyst: KB

Extraction Method: EPA 608
Extraction Date: 08/07/12 04:18
Cleanup Method1: EPA 3665A
Cleanup Date1: 08/07/12
Cleanup Method2: EPA 3660B
Cleanup Date2: 08/07/12

Parameter	Result	Qualifier	Units	RL	MDL
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01 Batch: WG553199-1					
Aroclor 1016	ND		ug/l	0.250	--
Aroclor 1221	ND		ug/l	0.250	--
Aroclor 1232	ND		ug/l	0.250	--
Aroclor 1242	ND		ug/l	0.250	--
Aroclor 1248	ND		ug/l	0.250	--
Aroclor 1254	ND		ug/l	0.250	--
Aroclor 1260	ND		ug/l	0.250	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	69		30-150
Decachlorobiphenyl	64		30-150

Matrix Spike Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553199-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Aroclor 1016	ND	2	1.50	75		-	-		40-140	-		50
Aroclor 1260	ND	2	1.24	62		-	-		40-140	-		50

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
2,4,5,6-Tetrachloro-m-xylene	67				30-150
Decachlorobiphenyl	52				30-150

Lab Control Sample Analysis**Batch Quality Control****Project Name:** 160 CAMBRIDGE PARK DRIVE**Project Number:** 35060-041**Lab Number:** L1214029**Report Date:** 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 Batch: WG553199-2								
Aroclor 1016	78		-		40-140	-		50
Aroclor 1260	68		-		40-140	-		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	66				30-150
Decachlorobiphenyl	53				30-150

Lab Duplicate Analysis Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553199-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Aroclor 1016	ND	ND	ug/l	NC		50
Aroclor 1221	ND	ND	ug/l	NC		50
Aroclor 1232	ND	ND	ug/l	NC		50
Aroclor 1242	ND	ND	ug/l	NC		50
Aroclor 1248	ND	ND	ug/l	NC		50
Aroclor 1254	ND	ND	ug/l	NC		50
Aroclor 1260	ND	ND	ug/l	NC		50

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
2,4,5,6-Tetrachloro-m-xylene	78		82		30-150
Decachlorobiphenyl	52		54		30-150

METALS

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

SAMPLE RESULTS

Lab ID: L1214029-01
Client ID: 2012_0806_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water

Date Collected: 08/06/12 10:40
Date Received: 08/06/12
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Antimony, Total	0.0014		mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Arsenic, Total	0.0374		mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Cadmium, Total	ND		mg/l	0.0002	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Chromium, Total	0.0014		mg/l	0.0010	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Copper, Total	0.0013		mg/l	0.0010	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Iron, Total	7.1		mg/l	0.05	--	1	08/07/12 11:30	08/09/12 00:03	EPA 3005A	19,200.7	BM
Lead, Total	0.0019		mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Mercury, Total	ND		mg/l	0.0002	--	1	08/09/12 15:25	08/10/12 12:44	EPA 245.1	3,245.1	JH
Nickel, Total	0.0024		mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Selenium, Total	ND		mg/l	0.0050	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Silver, Total	0.0005		mg/l	0.0004	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Zinc, Total	0.0163		mg/l	0.0100	--	1	08/07/12 11:30	08/09/12 11:02	EPA 3005A	1,6020	AK
Dissolved Metals - Westborough Lab											
Antimony, Dissolved	0.0013		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Arsenic, Dissolved	0.0176		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Copper, Dissolved	ND		mg/l	0.0010	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Iron, Dissolved	3.4		mg/l	0.05	--	1	08/07/12 14:20	08/09/12 16:22	NA	19,200.7	BM
Lead, Dissolved	ND		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Mercury, Dissolved	ND		mg/l	0.0002	--	1	08/09/12 15:25	08/10/12 15:04	EPA 245.1	3,245.1	JH
Nickel, Dissolved	0.0045		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0004	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK
Zinc, Dissolved	0.0167		mg/l	0.0100	--	1	08/07/12 14:20	08/08/12 15:19	NA	1,6020	AK



Project Name: 160 CAMBRIDGE PARK DRIVE

Lab Number: L1214029

Project Number: 35060-041

Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG553337-1										
Antimony, Dissolved	ND		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Arsenic, Dissolved	ND		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Cadmium, Dissolved	ND		mg/l	0.0002	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Chromium, Dissolved	ND		mg/l	0.0010	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Copper, Dissolved	ND		mg/l	0.0010	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Lead, Dissolved	ND		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Nickel, Dissolved	ND		mg/l	0.0005	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Selenium, Dissolved	ND		mg/l	0.005	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Silver, Dissolved	ND		mg/l	0.0004	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK
Zinc, Dissolved	ND		mg/l	0.0100	--	1	08/07/12 14:20	08/08/12 14:16	1,6020	AK

Prep Information

Digestion Method: NA

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG553514-1										
Iron, Total	ND		mg/l	0.05	--	1	08/07/12 11:30	08/08/12 23:37	19,200.7	BM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG553765-1										
Iron, Dissolved	ND		mg/l	0.05	--	1	08/07/12 14:20	08/09/12 16:16	19,200.7	BM

Prep Information

Digestion Method: NA

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG553780-1									
Antimony, Total	ND	mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Arsenic, Total	ND	mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Cadmium, Total	ND	mg/l	0.0002	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Chromium, Total	ND	mg/l	0.0010	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Copper, Total	ND	mg/l	0.0010	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Lead, Total	ND	mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Nickel, Total	ND	mg/l	0.0005	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Selenium, Total	ND	mg/l	0.005	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Silver, Total	ND	mg/l	0.0004	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK
Zinc, Total	ND	mg/l	0.0100	--	1	08/07/12 11:30	08/09/12 10:37	1,6020	AK

Prep Information

Digestion Method: EPA 3005A

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Westborough Lab for sample(s): 01 Batch: WG553874-1									
Mercury, Dissolved	ND	mg/l	0.0002	--	1	08/09/12 15:25	08/10/12 15:00	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG553877-1									
Mercury, Total	ND	mg/l	0.0002	--	1	08/09/12 15:25	08/10/12 12:28	3,245.1	JH

Prep Information

Digestion Method: EPA 245.1

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG553337-2								
Antimony, Dissolved	98		-		80-120	-		
Arsenic, Dissolved	107		-		80-120	-		
Cadmium, Dissolved	106		-		80-120	-		
Chromium, Dissolved	95		-		80-120	-		
Copper, Dissolved	98		-		80-120	-		
Lead, Dissolved	100		-		80-120	-		
Nickel, Dissolved	98		-		80-120	-		
Selenium, Dissolved	112		-		80-120	-		
Silver, Dissolved	94		-		80-120	-		
Zinc, Dissolved	107		-		80-120	-		
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG553514-2								
Iron, Total	100		-		85-115	-		
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG553765-2								
Iron, Dissolved	100		-		85-115	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG553780-2					
Antimony, Total	92	-	80-120	-	
Arsenic, Total	97	-	80-120	-	
Cadmium, Total	107	-	80-120	-	
Chromium, Total	91	-	80-120	-	
Copper, Total	95	-	80-120	-	
Lead, Total	98	-	80-120	-	
Nickel, Total	96	-	80-120	-	
Selenium, Total	108	-	80-120	-	
Silver, Total	89	-	80-120	-	
Zinc, Total	106	-	80-120	-	
Dissolved Metals - Westborough Lab Associated sample(s): 01 Batch: WG553874-2					
Mercury, Dissolved	102	-	85-115	-	
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG553877-2					
Mercury, Total	97	-	85-115	-	

Matrix Spike Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553337-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Antimony, Dissolved	0.0013	0.5	0.4284	85		-	-		80-120	-		20
Arsenic, Dissolved	0.0176	0.12	0.1507	111		-	-		80-120	-		20
Cadmium, Dissolved	ND	0.051	0.0550	108		-	-		80-120	-		20
Chromium, Dissolved	ND	0.2	0.1908	95		-	-		80-120	-		20
Copper, Dissolved	ND	0.25	0.2470	99		-	-		80-120	-		20
Lead, Dissolved	ND	0.51	0.5114	100		-	-		80-120	-		20
Nickel, Dissolved	0.0045	0.5	0.4959	98		-	-		80-120	-		20
Selenium, Dissolved	ND	0.12	0.134	112		-	-		80-120	-		20
Silver, Dissolved	ND	0.05	0.0429	86		-	-		80-120	-		20
Zinc, Dissolved	0.0167	0.5	0.5667	110		-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553514-4 QC Sample: L1213685-24 Client ID: MS Sample												
Iron, Total	ND	1	1.1	110		-	-		75-125	-		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553765-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Iron, Dissolved	3.4	1	4.2	80		-	-		75-125	-		20

Matrix Spike Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553780-4 QC Sample: L1213685-27 Client ID: MS Sample									
Antimony, Total	0.0226	0.5	0.4970	95	-	-	80-120	-	20
Arsenic, Total	0.0047	0.12	0.1335	107	-	-	80-120	-	20
Cadmium, Total	ND	0.051	0.0538	105	-	-	80-120	-	20
Chromium, Total	ND	0.2	0.1798	90	-	-	80-120	-	20
Copper, Total	0.0380	0.25	0.2774	96	-	-	80-120	-	20
Lead, Total	ND	0.51	0.5037	99	-	-	80-120	-	20
Nickel, Total	0.0030	0.5	0.4699	93	-	-	80-120	-	20
Selenium, Total	ND	0.12	0.130	108	-	-	80-120	-	20
Silver, Total	ND	0.05	0.0462	92	-	-	80-120	-	20
Zinc, Total	0.0779	0.5	0.6042	105	-	-	80-120	-	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553874-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1									
Mercury, Dissolved	ND	0.001	0.0014	138	Q	-	70-130	-	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553877-4 QC Sample: L1213957-02 Client ID: MS Sample									
Mercury, Total	ND	0.001	0.0013	134	Q	-	70-130	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553337-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Antimony, Dissolved	0.0013	0.0013	mg/l	3		20
Arsenic, Dissolved	0.0176	0.0182	mg/l	3		20
Cadmium, Dissolved	ND	ND	mg/l	NC		20
Chromium, Dissolved	ND	ND	mg/l	NC		20
Copper, Dissolved	ND	ND	mg/l	NC		20
Lead, Dissolved	ND	ND	mg/l	NC		20
Nickel, Dissolved	0.0045	0.0043	mg/l	4		20
Selenium, Dissolved	ND	ND	mg/l	NC		20
Silver, Dissolved	ND	ND	mg/l	NC		20
Zinc, Dissolved	0.0167	0.0146	mg/l	13		20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553514-3 QC Sample: L1213685-24 Client ID: DUP Sample						
Iron, Total	ND	ND	mg/l	NC		20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553765-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Iron, Dissolved	3.4	3.3	mg/l	3		20

Lab Duplicate Analysis Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553780-3 QC Sample: L1213685-27 Client ID: DUP Sample					
Antimony, Total	0.0226	0.0214	mg/l	6	20
Arsenic, Total	0.0047	0.0044	mg/l	5	20
Cadmium, Total	ND	ND	mg/l	NC	20
Chromium, Total	ND	ND	mg/l	NC	20
Copper, Total	0.0380	0.0362	mg/l	5	20
Lead, Total	ND	ND	mg/l	NC	20
Nickel, Total	0.0030	0.00290	mg/l	2	20
Selenium, Total	ND	ND	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Zinc, Total	0.0779	0.0753	mg/l	3	20
Dissolved Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553874-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1					
Mercury, Dissolved	ND	ND	mg/l	NC	20
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553877-3 QC Sample: L1213957-02 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20

INORGANICS & MISCELLANEOUS

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

SAMPLE RESULTS

Lab ID: L1214029-01
Client ID: 2012_0806_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water

Date Collected: 08/06/12 10:40
Date Received: 08/06/12
Field Prep: See Narrative

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total Suspended	9.2		mg/l	5.0	NA	1	-	08/08/12 14:00	30,2540D	DW
Cyanide, Total	0.009		mg/l	0.005	--	1	08/07/12 09:30	08/09/12 13:39	30,4500CN-CE	JO
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	08/06/12 19:15	30,4500CL-D	ML
TPH	ND		mg/l	4.00	--	1	08/08/12 13:45	08/10/12 14:00	74,1664A	JO
Phenolics, Total	ND		mg/l	0.03	--	1	08/09/12 09:00	08/09/12 11:05	4,420.1	MP
Chromium, Hexavalent	ND		mg/l	0.010	--	1	08/06/12 19:20	08/06/12 19:44	30,3500CR-D	DE
Anions by Ion Chromatography - Westborough Lab										
Chloride	500		mg/l	25	--	50	-	08/09/12 19:40	44,300.0	AU



Project Name: 160 CAMBRIDGE PARK DRIVE

Lab Number: L1214029

Project Number: 35060-041

Report Date: 08/10/12

Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553162-1										
Chlorine, Total Residual	ND		mg/l	0.02	--	1	-	08/06/12 19:15	30,4500CL-D	ML
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553163-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	08/06/12 19:20	08/06/12 19:42	30,3500CR-D	DE
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553211-1										
Cyanide, Total	ND		mg/l	0.005	--	1	08/07/12 09:30	08/09/12 13:08	30,4500CN-CE	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553509-1										
Solids, Total Suspended	ND		mg/l	5.0	NA	1	-	08/08/12 14:00	30,2540D	DW
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553597-2										
TPH	ND		mg/l	4.00	--	1	08/08/12 13:45	08/10/12 14:00	74,1664A	JO
General Chemistry - Westborough Lab for sample(s): 01 Batch: WG553784-1										
Phenolics, Total	ND		mg/l	0.03	--	1	08/09/12 09:00	08/09/12 11:02	4,420.1	MP
Anions by Ion Chromatography - Westborough Lab for sample(s): 01 Batch: WG553980-1										
Chloride	ND		mg/l	0.50	--	1	-	08/09/12 17:52	44,300.0	AU

Lab Control Sample Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG553162-2								
Chlorine, Total Residual	109		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG553163-2								
Chromium, Hexavalent	100		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG553211-2								
Cyanide, Total	93		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG553597-1								
TPH	90		-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 Batch: WG553784-2								
Phenolics, Total	104		-		82-111	-		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 Batch: WG553980-2								
Chloride	102		-		90-110	-		

Matrix Spike Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553163-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Chromium, Hexavalent	ND	0.1	0.106	106		-	-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553211-3 QC Sample: L1213854-02 Client ID: MS Sample												
Cyanide, Total	0.006	0.2	0.215	104		-	-		90-110	-		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553597-3 QC Sample: L1214130-02 Client ID: MS Sample												
TPH	ND	20.6	20.6	100		-	-		64-132	-		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553784-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Phenolics, Total	ND	0.8	0.80	100		-	-		77-124	-		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553980-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1												
Chloride	500	200	690	100		-	-		40-151	-		18

Lab Duplicate Analysis

Batch Quality Control

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553162-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Chlorine, Total Residual	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553163-3 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553211-4 QC Sample: L1213885-02 Client ID: DUP Sample						
Cyanide, Total	ND	ND	mg/l	NC		30
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553509-2 QC Sample: L1213742-06 Client ID: DUP Sample						
Solids, Total Suspended	ND	5.2	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553597-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
TPH	ND	ND	mg/l	NC		34
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553784-3 QC Sample: L1213799-01 Client ID: DUP Sample						
Phenolics, Total	0.03	0.03	mg/l	0		12
Anions by Ion Chromatography - Westborough Lab Associated sample(s): 01 QC Batch ID: WG553980-4 QC Sample: L1214029-01 Client ID: 2012_0806_NPDES1						
Chloride	500	540	mg/l	8		18

Project Name: 160 CAMBRIDGE PARK DRIVE

Project Number: 35060-041

Lab Number: L1214029

Report Date: 08/10/12

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

B Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1214029-01A	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1214029-01B	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1214029-01C	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1214029-01D	Vial HCl preserved	A	N/A	3	Y	Absent	8260-SIM(14),8260(14)
L1214029-01E	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1214029-01F	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1214029-01G	Vial Na2S2O3 preserved	A	N/A	3	Y	Absent	504(14)
L1214029-01H	Amber 1000ml HCl preserved	A	N/A	3	Y	Absent	TPH-1664(28)
L1214029-01I	Amber 1000ml HCl preserved	A	N/A	3	Y	Absent	TPH-1664(28)
L1214029-01J	Amber 1000ml Na2S2O3	A	7	3	Y	Absent	PCB-608(7)
L1214029-01K	Amber 1000ml Na2S2O3	A	7	3	Y	Absent	PCB-608(7)
L1214029-01L	Amber 1000ml H2SO4 preserved	A	<2	3	Y	Absent	TPHENOL-420(28)
L1214029-01M	Plastic 1000ml unpreserved	A	7	3	Y	Absent	TSS-2540(7)
L1214029-01N	Plastic 500ml unpreserved	A	7	3	Y	Absent	HEXCR-3500(1),TRC-4500(1)
L1214029-01O	Plastic 500ml HNO3 preserved	A	<2	3	Y	Absent	CU-6020S(180),FE-RI(180),SE-6020S(180),ZN-6020S(180),CR-6020S(180),NI-6020S(180),PB-6020S(180),AG-6020S(180),AS-6020S(180),HG-R(28),SB-6020S(180),CD-6020S(180)
L1214029-01P	Plastic 250ml HNO3 preserved	A	<2	3	Y	Absent	SE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),FE-UI(180),PB-6020T(180),HG-U(28),AS-6020T(180),SB-6020T(180),AG-6020T(180),CD-6020T(180)
L1214029-01R	Plastic 250ml NaOH preserved	A	>12	3	Y	Absent	TCN-4500(14)
L1214029-01S	Plastic 250ml unpreserved	A	7	3	Y	Absent	CL-300(28)

*Values in parentheses indicate holding time in days



Project Name: 160 CAMBRIDGE PARK DRIVE**Project Number:** 35060-041**Lab Number:** L1214029**Report Date:** 08/10/12**Container Information**

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
--------------	----------------	--------	----	---------------	------	------	-------------

Container Comments

L1214029-01P

*Values in parentheses indicate holding time in days



Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 160 CAMBRIDGE PARK DRIVE
Project Number: 35060-041

Lab Number: L1214029
Report Date: 08/10/12

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997.
- 3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.
- 4 Methods for Chemical Analysis of Water and Wastes. EPA 600/4-79-020. Revised March 1983.
- 5 Methods for the Organic Chemical Analysis of Municipal and Industrial Wastewater. Appendix A, Part 136, 40 CFR (Code of Federal Regulations).
- 14 Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water. EPA/600/4-88/039, Revised July 1991.
- 19 Inductively Coupled Plasma Atomic Emission Spectrometric Method for Trace Element Analysis of Water and Wastes. Appendix C, Part 136, 40 CFR (Code of Federal Regulations). July 1, 1999 edition.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.
- 44 Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100, August 1993.
- 74 Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil & Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry, EPA-821-R-98-002, February 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised August 3, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500Cl-D, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO₃-F, 353.2, 4500P-E, 4500SO₄-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311, 1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO₃-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A, 3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO₂-B, 4500NO₃-F, 4500S-D, 4500SO₃-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH₃-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NJ-DEP.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH₃-H, 4500NO₂B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO₃-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO₃-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, *Organic Parameters:* EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease



ANALYTICAL REPORT

Lab Number:	L1214375
Client:	Haley & Aldrich, Inc. 465 Medford St S-2200 Charlestown, MA 02129-1400
ATTN:	Todd Butler
Phone:	(617) 886-7424
Project Name:	106 CAMBRIDGE PARK DR.
Project Number:	35060-041
Report Date:	08/16/12

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 106 CAMBRIDGE PARK DR.
Project Number: 35060-041

Lab Number: L1214375
Report Date: 08/16/12

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1214375-01	2012_0810_NPDES1	CAMBRIDGE, MA	08/10/12 10:15

Project Name: 106 CAMBRIDGE PARK DR.

Lab Number: L1214375

Project Number: 35060-041

Report Date: 08/16/12

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES
A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	NO
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES
For any questions answered "No", please refer to the case narrative section on the following page(s).		

Please note that sample matrix information is located in the Sample Results section of this report.



Project Name: 106 CAMBRIDGE PARK DR.
Project Number: 35060-041

Lab Number: L1214375
Report Date: 08/16/12

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kelly Stenstrom

Title: Technical Director/Representative

Date: 08/16/12

ORGANICS

SEMIVOLATILES

Project Name: 106 CAMBRIDGE PARK DR.**Lab Number:** L1214375**Project Number:** 35060-041**Report Date:** 08/16/12**SAMPLE RESULTS**

Lab ID: L1214375-01
Client ID: 2012_0810_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water
Analytical Method: 97,8270D
Analytical Date: 08/15/12 12:40
Analyst: RC

Date Collected: 08/10/12 10:15
Date Received: 08/10/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 08/10/12 22:46

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--	1
1,2-Dichlorobenzene	ND		ug/l	2.0	--	1
1,3-Dichlorobenzene	ND		ug/l	2.0	--	1
1,4-Dichlorobenzene	ND		ug/l	2.0	--	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--	1
2,4-Dinitrotoluene	ND		ug/l	5.0	--	1
2,6-Dinitrotoluene	ND		ug/l	5.0	--	1
Azobenzene	ND		ug/l	2.0	--	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--	1
Isophorone	ND		ug/l	5.0	--	1
Nitrobenzene	ND		ug/l	2.0	--	1
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	--	1
Butyl benzyl phthalate	ND		ug/l	5.0	--	1
Di-n-butylphthalate	ND		ug/l	5.0	--	1
Di-n-octylphthalate	ND		ug/l	5.0	--	1
Diethyl phthalate	ND		ug/l	5.0	--	1
Dimethyl phthalate	ND		ug/l	5.0	--	1
Aniline	ND		ug/l	2.0	--	1
4-Chloroaniline	ND		ug/l	5.0	--	1
Dibenzofuran	ND		ug/l	2.0	--	1
Acetophenone	ND		ug/l	5.0	--	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	--	1
2-Chlorophenol	ND		ug/l	2.0	--	1
2,4-Dichlorophenol	ND		ug/l	5.0	--	1
2,4-Dimethylphenol	ND		ug/l	5.0	--	1
2-Nitrophenol	ND		ug/l	10	--	1
4-Nitrophenol	ND		ug/l	10	--	1
2,4-Dinitrophenol	ND		ug/l	20	--	1

Project Name: 106 CAMBRIDGE PARK DR.**Lab Number:** L1214375**Project Number:** 35060-041**Report Date:** 08/16/12**SAMPLE RESULTS**

Lab ID: L1214375-01

Date Collected: 08/10/12 10:15

Client ID: 2012_0810_NPDES1

Date Received: 08/10/12

Sample Location: CAMBRIDGE, MA

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
-----------	--------	-----------	-------	----	-----	-----------------

MCP Semivolatile Organics - Westborough Lab

Phenol	ND		ug/l	5.0	--	1
2-Methylphenol	ND		ug/l	5.0	--	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		15-110
Phenol-d6	37		15-110
Nitrobenzene-d5	77		30-130
2-Fluorobiphenyl	87		30-130
2,4,6-Tribromophenol	132	Q	15-110
4-Terphenyl-d14	140	Q	30-130

Project Name: 106 CAMBRIDGE PARK DR.**Lab Number:** L1214375**Project Number:** 35060-041**Report Date:** 08/16/12**SAMPLE RESULTS**

Lab ID: L1214375-01
Client ID: 2012_0810_NPDES1
Sample Location: CAMBRIDGE, MA
Matrix: Water
Analytical Method: 97,8270D-SIM
Analytical Date: 08/14/12 12:07
Analyst: AS

Date Collected: 08/10/12 10:15
Date Received: 08/10/12
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 08/10/12 22:52

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP Semivolatile Organics by SIM - Westborough Lab						
Acenaphthene	0.39		ug/l	0.20	--	1
2-Chloronaphthalene	ND		ug/l	0.20	--	1
Fluoranthene	0.76		ug/l	0.20	--	1
Hexachlorobutadiene	ND		ug/l	0.50	--	1
Naphthalene	ND		ug/l	0.20	--	1
Benzo(a)anthracene	0.24		ug/l	0.20	--	1
Benzo(a)pyrene	ND		ug/l	0.20	--	1
Benzo(b)fluoranthene	0.32		ug/l	0.20	--	1
Benzo(k)fluoranthene	0.26		ug/l	0.20	--	1
Chrysene	0.34		ug/l	0.20	--	1
Acenaphthylene	ND		ug/l	0.20	--	1
Anthracene	1.3		ug/l	0.20	--	1
Benzo(ghi)perylene	0.25		ug/l	0.20	--	1
Fluorene	0.31		ug/l	0.20	--	1
Phenanthrene	0.55		ug/l	0.20	--	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--	1
Indeno(1,2,3-cd)Pyrene	0.23		ug/l	0.20	--	1
Pyrene	0.52		ug/l	0.20	--	1
2-Methylnaphthalene	ND		ug/l	0.20	--	1
Pentachlorophenol	ND		ug/l	0.80	--	1
Hexachlorobenzene	ND		ug/l	0.80	--	1
Hexachloroethane	ND		ug/l	0.80	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		15-110
Phenol-d6	26		15-110
Nitrobenzene-d5	68		30-130
2-Fluorobiphenyl	62		30-130
2,4,6-Tribromophenol	98		15-110
4-Terphenyl-d14	103		30-130

Project Name: 106 CAMBRIDGE PARK DR.

Lab Number: L1214375

Project Number: 35060-041

Report Date: 08/16/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D
 Analytical Date: 08/15/12 11:25
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 08/10/12 22:46

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG554228-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	--
Bis(2-chloroethyl)ether	ND		ug/l	2.0	--
1,2-Dichlorobenzene	ND		ug/l	2.0	--
1,3-Dichlorobenzene	ND		ug/l	2.0	--
1,4-Dichlorobenzene	ND		ug/l	2.0	--
3,3'-Dichlorobenzidine	ND		ug/l	5.0	--
2,4-Dinitrotoluene	ND		ug/l	5.0	--
2,6-Dinitrotoluene	ND		ug/l	5.0	--
Azobenzene	ND		ug/l	2.0	--
4-Bromophenyl phenyl ether	ND		ug/l	2.0	--
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	--
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	--
Isophorone	ND		ug/l	5.0	--
Nitrobenzene	ND		ug/l	2.0	--
Bis(2-Ethylhexyl)phthalate	ND		ug/l	3.0	--
Butyl benzyl phthalate	ND		ug/l	5.0	--
Di-n-butylphthalate	ND		ug/l	5.0	--
Di-n-octylphthalate	ND		ug/l	5.0	--
Diethyl phthalate	ND		ug/l	5.0	--
Dimethyl phthalate	ND		ug/l	5.0	--
Aniline	ND		ug/l	2.0	--
4-Chloroaniline	ND		ug/l	5.0	--
Dibenzofuran	ND		ug/l	2.0	--
Acetophenone	ND		ug/l	5.0	--
2,4,6-Trichlorophenol	ND		ug/l	5.0	--
2-Chlorophenol	ND		ug/l	2.0	--
2,4-Dichlorophenol	ND		ug/l	5.0	--
2,4-Dimethylphenol	ND		ug/l	5.0	--
2-Nitrophenol	ND		ug/l	10	--
4-Nitrophenol	ND		ug/l	10	--
2,4-Dinitrophenol	ND		ug/l	20	--

Project Name: 106 CAMBRIDGE PARK DR.**Lab Number:** L1214375**Project Number:** 35060-041**Report Date:** 08/16/12

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D
 Analytical Date: 08/15/12 11:25
 Analyst: RC

Extraction Method: EPA 3510C
 Extraction Date: 08/10/12 22:46

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics - Westborough Lab for sample(s): 01 Batch: WG554228-1					
Phenol	ND		ug/l	5.0	--
2-Methylphenol	ND		ug/l	5.0	--
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	--
2,4,5-Trichlorophenol	ND		ug/l	5.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		15-110
Phenol-d6	30		15-110
Nitrobenzene-d5	63		30-130
2-Fluorobiphenyl	71		30-130
2,4,6-Tribromophenol	71		15-110
4-Terphenyl-d14	111		30-130

Project Name: 106 CAMBRIDGE PARK DR.

Lab Number: L1214375

Project Number: 35060-041

Report Date: 08/16/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D-SIM

Extraction Method: EPA 3510C

Analytical Date: 08/14/12 10:40

Extraction Date: 08/10/12 22:52

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG554229-1					
Acenaphthene	ND		ug/l	0.20	--
2-Chloronaphthalene	ND		ug/l	0.20	--
Fluoranthene	ND		ug/l	0.20	--
Hexachlorobutadiene	ND		ug/l	0.50	--
Naphthalene	ND		ug/l	0.20	--
Benzo(a)anthracene	ND		ug/l	0.20	--
Benzo(a)pyrene	ND		ug/l	0.20	--
Benzo(b)fluoranthene	ND		ug/l	0.20	--
Benzo(k)fluoranthene	ND		ug/l	0.20	--
Chrysene	ND		ug/l	0.20	--
Acenaphthylene	ND		ug/l	0.20	--
Anthracene	ND		ug/l	0.20	--
Benzo(ghi)perylene	ND		ug/l	0.20	--
Fluorene	ND		ug/l	0.20	--
Phenanthrene	ND		ug/l	0.20	--
Dibenzo(a,h)anthracene	ND		ug/l	0.20	--
Indeno(1,2,3-cd)Pyrene	ND		ug/l	0.20	--
Pyrene	ND		ug/l	0.20	--
2-Methylnaphthalene	ND		ug/l	0.20	--
Pentachlorophenol	ND		ug/l	0.80	--
Hexachlorobenzene	ND		ug/l	0.80	--
Hexachloroethane	ND		ug/l	0.80	--

Project Name: 106 CAMBRIDGE PARK DR.

Lab Number: L1214375

Project Number: 35060-041

Report Date: 08/16/12

Method Blank Analysis Batch Quality Control

Analytical Method: 97,8270D-SIM

Extraction Method: EPA 3510C

Analytical Date: 08/14/12 10:40

Extraction Date: 08/10/12 22:52

Analyst: AS

Parameter	Result	Qualifier	Units	RL	MDL
MCP Semivolatile Organics by SIM - Westborough Lab for sample(s): 01 Batch: WG554229-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		15-110
Phenol-d6	37		15-110
Nitrobenzene-d5	93		30-130
2-Fluorobiphenyl	78		30-130
2,4,6-Tribromophenol	98		15-110
4-Terphenyl-d14	124		30-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 106 CAMBRIDGE PARK DR.

Project Number: 35060-041

Lab Number: L1214375

Report Date: 08/16/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG554228-2 WG554228-3								
1,2,4-Trichlorobenzene	46		89		40-140	64	Q	20
Bis(2-chloroethyl)ether	63		103		40-140	48	Q	20
1,2-Dichlorobenzene	49		87		40-140	56	Q	20
1,3-Dichlorobenzene	43		79		40-140	59	Q	20
1,4-Dichlorobenzene	45		83		40-140	59	Q	20
3,3'-Dichlorobenzidine	99		118		40-140	18		20
2,4-Dinitrotoluene	119		140		40-140	16		20
2,6-Dinitrotoluene	113		138		40-140	20		20
Azobenzene	101		129		40-140	24	Q	20
4-Bromophenyl phenyl ether	101		128		40-140	24	Q	20
Bis(2-chloroisopropyl)ether	64		110		40-140	53	Q	20
Bis(2-chloroethoxy)methane	80		128		40-140	46	Q	20
Isophorone	82		128		40-140	44	Q	20
Nitrobenzene	64		112		40-140	55	Q	20
Bis(2-Ethylhexyl)phthalate	94		133		40-140	34	Q	20
Butyl benzyl phthalate	119		151	Q	40-140	24	Q	20
Di-n-butylphthalate	116		147	Q	40-140	24	Q	20
Di-n-octylphthalate	94		133		40-140	34	Q	20
Diethyl phthalate	109		134		40-140	21	Q	20
Dimethyl phthalate	100		128		40-140	25	Q	20
Aniline	38	Q	46		40-140	19		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 106 CAMBRIDGE PARK DR.

Project Number: 35060-041

Lab Number: L1214375

Report Date: 08/16/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG554228-2 WG554228-3								
4-Chloroaniline	87		105		40-140	19		20
Dibenzofuran	84		115		40-140	31	Q	20
Acetophenone	79		134		40-140	52	Q	20
2,4,6-Trichlorophenol	95		142	Q	30-130	40	Q	20
2-Chlorophenol	69		120		30-130	54	Q	20
2,4-Dichlorophenol	80		132	Q	30-130	49	Q	20
2,4-Dimethylphenol	60		86		30-130	36	Q	20
2-Nitrophenol	64		118		30-130	59	Q	20
4-Nitrophenol	60		76		30-130	24	Q	20
2,4-Dinitrophenol	108		139	Q	30-130	25	Q	20
Phenol	37		60		30-130	47	Q	20
2-Methylphenol	65		108		30-130	50	Q	20
3-Methylphenol/4-Methylphenol	62		100		30-130	47	Q	20
2,4,5-Trichlorophenol	108		145	Q	30-130	29	Q	20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 106 CAMBRIDGE PARK DR.

Lab Number: L1214375

Project Number: 35060-041

Report Date: 08/16/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
-----------	------------------	------	-------------------	------	---------------------	-----	------	------------

MCP Semivolatile Organics - Westborough Lab Associated sample(s): 01 Batch: WG554228-2 WG554228-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	46		76		15-110
Phenol-d6	39		63		15-110
Nitrobenzene-d5	77		123		30-130
2-Fluorobiphenyl	81		121		30-130
2,4,6-Tribromophenol	101		124	Q	15-110
4-Terphenyl-d14	116		136	Q	30-130

MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG554229-2 WG554229-3

Acenaphthene	67		86		40-140	25	Q	20
2-Chloronaphthalene	62		74		40-140	18		20
Fluoranthene	100		114		40-140	13		20
Hexachlorobutadiene	55		66		40-140	18		20
Naphthalene	60		74		40-140	21	Q	20
Benzo(a)anthracene	115		133		40-140	15		20
Benzo(a)pyrene	107		124		40-140	15		20
Benzo(b)fluoranthene	113		120		40-140	6		20
Benzo(k)fluoranthene	101		123		40-140	20		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 106 CAMBRIDGE PARK DR.

Project Number: 35060-041

Lab Number: L1214375

Report Date: 08/16/12

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP Semivolatile Organics by SIM - Westborough Lab Associated sample(s): 01 Batch: WG554229-2 WG554229-3								
Chrysene	95		110		40-140	15		20
Acenaphthylene	69		85		40-140	21	Q	20
Anthracene	88		104		40-140	17		20
Benzo(ghi)perylene	98		112		40-140	13		20
Fluorene	81		104		40-140	25	Q	20
Phenanthrene	85		101		40-140	17		20
Dibenzo(a,h)anthracene	102		117		40-140	14		20
Indeno(1,2,3-cd)Pyrene	106		121		40-140	13		20
Pyrene	93		106		40-140	13		20
2-Methylnaphthalene	60		74		40-140	21	Q	20
Pentachlorophenol	100		90		30-130	11		20
Hexachlorobenzene	77		93		40-140	19		20
Hexachloroethane	59		70		40-140	17		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	45		55		15-110
Phenol-d6	30		37		15-110
Nitrobenzene-d5	75		90		30-130
2-Fluorobiphenyl	64		75		30-130
2,4,6-Tribromophenol	88		107		15-110
4-Terphenyl-d14	97		110		30-130

Project Name: 106 CAMBRIDGE PARK DR.**Project Number:** 35060-041**Lab Number:** L1214375**Report Date:** 08/16/12**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1214375-01A	Amber 1000ml unpreserved	A	7	2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1214375-01B	Amber 1000ml unpreserved	A	7	2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1214375-01C	Amber 1000ml unpreserved	A	7	2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)
L1214375-01D	Amber 1000ml unpreserved	A	7	2	Y	Absent	MCP-8270-10(7),MCP-8270SIM-10(7)

*Values in parentheses indicate holding time in days

Project Name: 106 CAMBRIDGE PARK DR.
Project Number: 35060-041

Lab Number: L1214375
Report Date: 08/16/12

GLOSSARY

Acronyms

EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
C	- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
D	- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
E	- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
G	- The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
H	- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
I	- The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported due to obvious interference.
M	- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
NJ	- Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

Report Format: Data Usability Report



Project Name: 106 CAMBRIDGE PARK DR.
Project Number: 35060-041

Lab Number: L1214375
Report Date: 08/16/12

Data Qualifiers

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: 106 CAMBRIDGE PARK DR.
Project Number: 35060-041

Lab Number: L1214375
Report Date: 08/16/12

REFERENCES

- 97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certificate/Approval Program Summary

Last revised August 16, 2012 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held.
For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. **NELAP Accredited Solid Waste/Soil.**

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform – Colilert (SM9223, Enumeration and P/A), E. Coli. – Colilert (SM9223, Enumeration and P/A), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP (Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2130B, 2320B, 2540C, 4500CI-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 350.1, 351.1, 353.2, 410.4, 420.1, SM2320B, 2510B, 2540C, 2540D, 426C, 4500CI-D, 4500CI-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-B, 4500Norg-C, 4500NH3-B, 4500NH3-G, 4500NO3-F, 4500P-B, 4500P-E, 5210B, 5220D, 5310C, 9010B, 9040B, 9030B, 7470A, 7196A, 2340B, EPA 200.7, 6010B, 200.8, 6020, 245.1, 1311, 1312, 3005A, Enterolert, 9223D, 9222D. Organic Parameters: 608, 624, 625, 8081A, 8082, 8330, 8151A, 8260B, 8270C, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014A, 9030B, 9040B, 9045C, 6010B, 7471A, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260B, 8270C, 8330, 8151A, 8081A, 8082, 3540C, 3546, 3580A, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

for: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT,Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010B, 6010C, 6020, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9030B, 9040B, SM2120B, 2310B, 2320B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260B, 8270C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082, 8082A, 8081A, 8081B, 8151A, 8330, 8270C-SIM, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010B, 6010C, 7196A, 7471A, 1010, 1030, 9010, 9012A, 9014, 9030B, 9040B, 9045C, 9050, 9065,1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3630C, 5030B, 5035, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082, 8082A, 8081A, 8081B.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500CI-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310B, C or D, 4500-PE, EPA 420.1, SM510ABC, SM4500P-B5+E, 2540B, 2540C, 2540D, 2540G, EPA 120.1, SM2510B, SM2520B, SM15 426C, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010B, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Solid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9010B, 9030B, 1010, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9014, 9012A, 9040B, 9040C, 9045C, 9045D, 9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3630C, 5030B, 5035L, 5035H, NJ OQA-QAM-025 Rev.7, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.2, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B-4a, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010B, 6010C, 6020, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 245.2, 7470A, SM2120B, LACHAT 10-204-00-1-A, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 3005A, 3015, 9010B, 9030B. Organic Parameters: EPA 624, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 625, 608, 8081A, 8081B, 8151A, 8330, 8082, 8082A, EPA 3510C, 5030B.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010, 1030, EPA 6010B, 6010C, 7196A, 7471A, 7471B, 9012A, 9014, 9065, 9050A, EPA 1311, 1312, 3005A, 3050B, 9010B, 9040C, 9045D. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8015B, 8015C, 8081A, 8081B, 8151A, 8330, 8082 8082A, 3540C, 3546, 3580, 3580A, 5030B, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID : 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7471A, 7471B, 1311, 1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID : 68-03671. **NELAP Accredited.**
Drinking Water (Inorganic Parameters: 200.7, 200.8, 245.2, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A, 3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P, BE, 245.1, 300.0, 3501., 350.2, 353.2, 420.1, 6010B, 6010C, 6020, 6020A, 7196A, 7470A, 9010B, 9030B, 9040B, Lachat 10-107-06-2-D, NJ-EPH, 2120B, 2310B, 2320B, 2340B, 2510C, 2540B, 2540C, 3500Cr-D, 436C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8330, 8015B,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010B, 6010C, 6020A, 7196A, 7471A, 7471B, 9010B, 9012A, 9014, 9040B, 9045C, 9050, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3630C, 5035, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260B, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. **NELAP Accredited via NJ-DEP.**

Refer to MA-DEP Certificate for Potable and Non-Potable Water.

Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commission on Environmental Quality Certificate/Lab ID: T104704476-09-1. **NELAP Accredited.**

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S²⁻D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. **NELAP Accredited.**

Drinking Water (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.2, 2320B, 4500F-C, 4500F-C, 4500NO3-F, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-1-X, 7196A, 7470A, 9010B, 9040B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, , 7196A, 7471A, 7471B, 6020A, 9030B, 9010B, 9012A, 9014 9040B, 9045C, 9050A, 9065. Organic Parameters: EPA 5035, 3540C, 3546, 3550, 3580, 3630C, 8260B, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010B, 6010C, 6020, 6020A, 245.1, 245.2, 7470A, 9040B, 9010B, 180.1. 300.0, 332.0, 6860, 353.2, 410.4, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500NO3-F, 4500CL-D, 5220D, 5310C, 2130B, 2320B, 2540C, 3005A, 3015, 9010B, 9056. Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A, 8082, 8082A, 8081A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010B, 6010C, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9010B, 9012A, 9040B, 9045C, 3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330A/B-prep, 8082, 8082A, 8081A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 8260B: Freon-113, 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnaphthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine (Azobenzene). **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, Chloride in a soil matrix, TKN in a soil matrix, NO₂ in a soil matrix, NO₃ in a soil matrix, SO₄ in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.



CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab: 8-10-12

ALPHA Job #: L1214375

WESTBORO, MA

MANFIELD, MA

Project Information

TEL: 508-898-9220

TEL: 508-822-9300

Project Name: 106 Cambridge Park Dr

Project Location: Cambridge, MA

FAX: 508-898-9193

FAX: 508-822-3288

Project #:

3506-091

Project Manager: Todd Butler

Report Information - Data Deliverables

☐ FAX ☐ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info

PO #:

Regulatory Requirements/Report Limits

Client Information

Client: Haley & Alhadeh Inc

Address: 465 Medford St

City: Boston MA

State/Fed Program

Criteria

MA MCP PRESUMPTIVE CERTAINTY ... CT REASONABLE CONFIDENCE PROTO

Phone: 617 886-7720

Turn-Around Time

ALPHA Quote #:

ANALYSIS

☒ Yes ☐ No

Are MCP Analytical Methods Required?

☐ Yes ☒ No

Is Matrix Spike (MS) Required on this SDG? (If yes see note in Comments)

☐ Yes ☒ No

Are CT RCP (Reasonable Confidence Protocols) Required?

SAMPLE HANDLING

Filtration

Fax:

Standard

☒ RUSH (only confirmed if pre-approved)

Date Due: 8/10/12

Time:

Other Project Specific Requirements/Comments/Detection Limits:

If MS is required, indicate in Sample Specific Comments which samples and what tests MS to be performed.

(Note: All CAM methods for Inorganic analyses require MS every 20 soil samples)

Sample Specific Comments

Alpha Lab ID (Lab Use Only)

Sample ID

Collection Date

Time

Sample Matrix

Sampler's Initials

Container Type

Preservative

Date/Time

Received By:

Date/Time

Relinquished By:

Date/Time

MA MCP or CT RCP?

FORM NO: 01-01 (rev. 18-Jan-2010)

Page 26 of 26